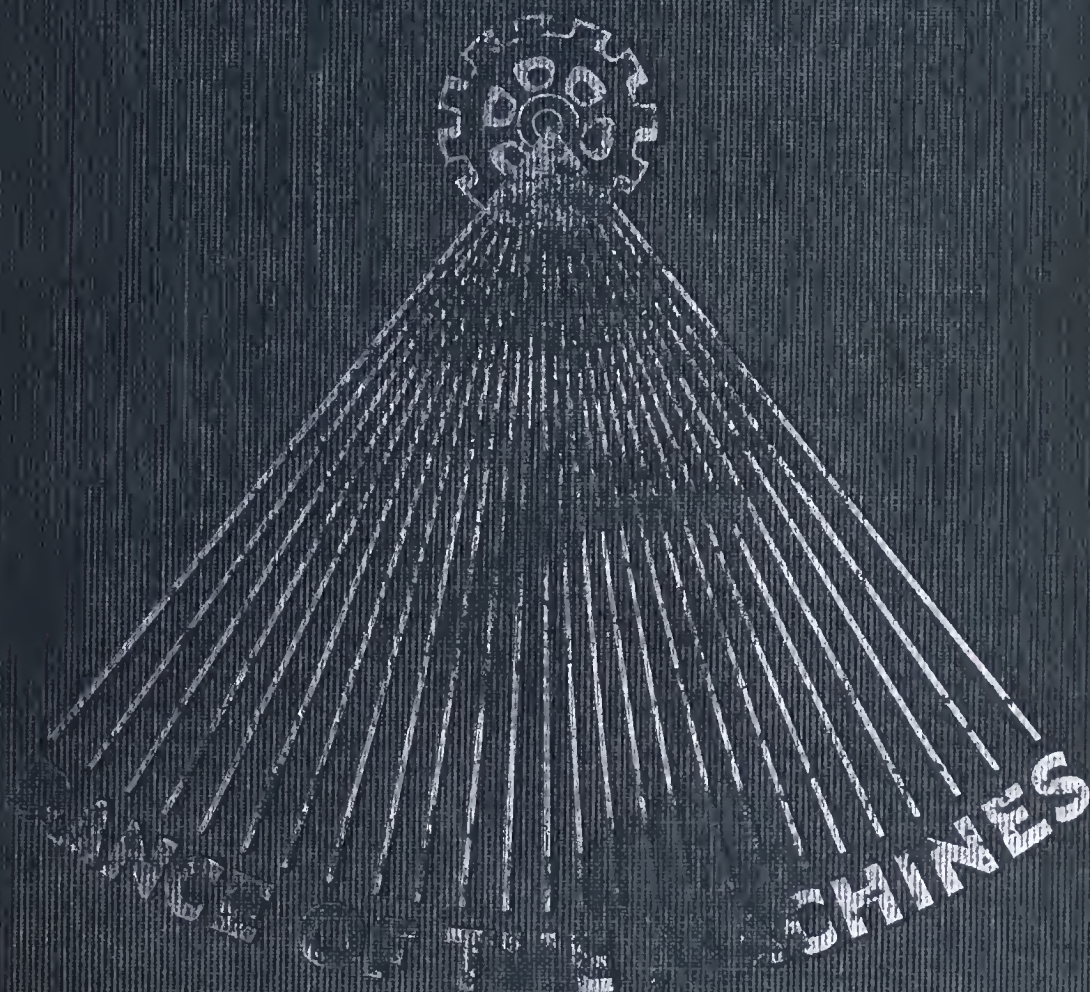


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THE DANCE OF THE MACHINES

THE AMERICAN SHORT STORY
AND THE INDUSTRIAL AGE

By EDWARD J. O'BRIEN

AUTHOR OF
"THE ADVANCE OF THE AMERICAN
SHORT STORY"



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TO
THE
OTHER
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PREFATORY NOTE

"THE DANCE OF THE MACHINES" is to be taken as the first of three books dealing with the same subject in different aspects. In the present volume I have endeavored to analyze the qualities of a machine and to show how the machine has so far influenced life and art. In the second book, which will be called "Mechanistic Structures," I shall endeavor to analyze the various forms of human life in America and elsewhere which are organized on a machine basis, and to show how large organized masses of human beings are tending to become more and more like machines.

After reading these two books, I hope you will agree with me that the present course of machine civilization is not only undesirable, but that it is imperative for us to devise quickly all possible means of ensuring that we shall retain control of the machine and of ourselves rather than that the machine and mechanistic structures shall make us their slaves. In my third little book, I hope to propose the necessary means of gaining control and to suggest a practicable method of applying these means.

While the present book may appear at first sight to be a rambling discussion of many things, seem-

ingly unrelated, I trust that the unity of this discussion will be apparent to the reader as soon as he has finished reading the book. I am not a professional philosopher nor am I a professional social critic. After sweeping American literary crossings for a great many years, I find that I have observed many things and that these things have been slowly forming into a pattern which was not determined by my choice.

Please do not regard this book as dogmatic. I welcome every kind of challenge or criticism. My faith in America is such that I believe it can bear a great deal of severe criticism without rancor. As I am an American, you may also take it that my criticism of America is a criticism of myself.

I wish to make formal acknowledgments to *The Modern Quarterly* for affording me the opportunity to publish in its pages an article of which this book is an expansion. I wish to thank its editor, Mr. V. F. Calverton, not only for permission to reprint what has already appeared in *The Modern Quarterly*, but for his disinterested efforts to obtain a wider public for what I have to say than publication in a quarterly review could possibly offer.

You will find reprinted as a pertinent appendix to this book an amusing article by John Riddell which has appeared in *Vanity Fair*. I have no reflections to make upon this article, except to state that I am not personally acquainted with Mr. Riddell, but that I

cordially agree with the critical attitude which his delightful parody implies. I wish to offer my best thanks to Mr. Riddell and to *Vanity Fair* for their kind permission to reprint the article.

E. J. O.

Locarno,

March 28, 1929.

"We refer to the question: What sort of creature man's next successor in the supremacy of the earth is likely to be. We have often heard this debated; but it appears to us that we are ourselves creating our own successors; we are daily adding to the beauty and delicacy of their physical organisation; we are daily giving them greater power and supplying, by all sorts of ingenious contrivances, that self-regulating, self-active power which will be to them what intellect has been to the human race. In the course of ages we shall find ourselves the inferior race. Inferior in power, inferior in that moral quality of self-control, we shall look up to them as the acme of all that the best and wisest man can ever dare to aim at. . . . Day by day the machines are gaining ground upon us; day by day we are becoming more subservient to them; more men are daily bound down as slaves to tend them, more men are daily devoting the energies of their whole lives to the development of mechanical life. The upshot is simply a question of time, but that the time will come when the machines will hold the real supremacy over the world and its inhabitants is what no person of a truly philosophic mind can for a moment question."—*Samuel Butler: Letter to the Press, Christchurch, New Zealand, June 13, 1863.*

"To err is human."—*Proverb among the Machines.*

CHAPTER ONE

THE view which I shall express in these pages is unusual, and in so far as it diverges from other views commonly held, I offer it as a basis for discussion and criticism. I believe that, while the interpretation of the facts which I offer is fairly familiar in many aspects to those who have thought clearly upon the subject, there is not as yet any complete single exposition in which the structural relation of these facts to one another has been pointed out with sufficient clearness. My object will be achieved if this study prompts those who disagree with it to find another explanation of the facts which will lead to a clearer understanding of our situation. We must understand our situation clearly before we can begin to deal with it constructively.

i

American life has been chiefly shaped for our generation by the spiritual dictatorship of machinery, warfare, and magazines and newspapers of large circulation. To these shaping influences are now to be added the motion picture, the radio, the gramophone, the automobile, the corporation, queen-bee finance,

and all forms of national and international advertising and propaganda.

It is at once evident that these shaping forces owe their existence in the form in which we know them almost entirely to the achievements of applied science. We hear a great deal of talk nowadays about the preëminence of science and the untold benefits which it has conferred upon the human race. It is continually suggested to us, and not without excellent reason, that science is our chief benefactor, and that it is solely responsible for our supposed superiority to our forefathers. We are told that it is science which has made this the best of all possible worlds and has made us better than all previous peoples.

I do not intend to analyse these statements for the moment, nor to argue either in their favor or against them. Such arguments are a favorite indoor sport and are pursued endlessly to utterly inconclusive results. At this stage, I wish merely to suggest that it would be well for you, before undertaking to decide these questions, to distinguish between pure science and applied science, and to ask yourself what end pure science has in view when it pursues its activities and what end applied science has in view.

Pure science is disinterested and tries to find things out for their own sake, while applied science chooses from all the new things which pure science has found out only what it can apply immediately towards

making or changing something, in order to respond to a desire which is already felt or to create a new desire and then satisfy it. Some years ago a pure scientist, Bertrand Russell, remarked: "Science, hitherto, has been used for three purposes: to increase the total production of commodities; to make wars more destructive; and to substitute trivial amusements for those that had some artistic or hygienic value."¹ In other words, science has been applied so far either to increase the number of material things, or to degrade and destroy human beings. We must presume, therefore, that these are the present ends of *applied* science, however unconscious of these ends applied science may be.

As we use the word "science" in everyday life, we really mean applied science. It is this applied science which is continually held up to us for reverence as a new religion. We must therefore come to the conclusion that this new religion proposes to us as the end and aim of life what has hitherto been the end and aim of applied science,—that is to say, to increase the number of material things and to degrade and destroy human beings. A religion is to be judged after all by its fruits. It seems to me that this new religion is going to call for a great deal of self-sacrifice on everybody's part if you and I are to acquiesce in the only ends which it has so far shown us.

¹ Bertrand Russell. "Leisure and Mechanism," *The Dial*, August, 1923.

ii

Let us set aside this general problem for the moment, and see what we can discover in the everyday life about us which is most familiar and which has most effect upon us at every moment of the day. It is obvious that most of our actions are ruled by the effects of applied science. Now how is science applied?

The answer to this question is very simple. It is applied through machines. Machines either act upon us directly, or their own special form of construction and general character is copied by us as human beings so that we tend to band together in a machine-like way to do machine-like things which we could not otherwise achieve single-handed. When we band together like that, it is my belief that we tend to act more and more like machines and less and less like Walter Jones and Mary Smith. A band of us acting together in this manner for a mechanical end, with or without the assistance of machinery, is what I call a *mechanistic structure*. I shall have occasion to use very few uncommon expressions in the course of this book, but you are likely to hear this expression constantly. Please bear in mind, therefore, what I mean when I speak of a *mechanistic structure*.

iii

Now we are ready to set sail on our voyage in the course of which we shall cast anchor in a variety of ports. I want you to go ashore with me in each of these ports and see the chief points of interest. I shall point out to you those which interest me most and which ought in my opinion to concern you most, but if you are clever you will desert me from time to time and wander off by yourself. When you come back from your solitary excursions, I hope you will have some discoveries of your own to report. You can help me in this way far more than I can ever hope to help you.

Please do not hurry over this voyage. It may be that you will make so many discoveries at the first port, and be so anxious to consider them and to report on them to others, that you will have no time to continue the rest of the voyage. If such proves to be the case, I shall be altogether pleased. Or again what your eyes discover may be so different from what I think I have seen with my own eyes that you can set me right and prevent me from leading other people astray again in the future. If you succeed to this extent, you may be the first real discoverers of America. America hasn't been discovered yet, you know. Whenever you discover it, you will be able to change the whole course of its history if you like.

iv

When people embark on a cruise, they like to have a simple map of the journey to study beforehand. Here is a rough outline map of the mental journey which you and I are undertaking together. It is my purpose to examine first of all the chief characteristics of a machine, or of a mechanistic structure in which machinery plays a prominent part; secondly, the characteristics of an army; and thirdly, the characteristics of the American short story. I hope to point out that these three things,—machinery, an army, and the American short story,—share so many qualities in common that they seem to belong to the same strange family. I have chosen the short story for consideration because it is the most typical American literary form.

After this examination I propose to discuss certain aspects of Puritanism, using the word Puritanism in the sense of extreme and continuous protest against something. Puritans have controlled for good and for evil the three principal forces of our generation in America. I shall therefore deal with Puritanism, first in its relations with industry, which uses machinery as a tool; secondly, with imperialism which uses armies as a tool; and lastly with the American mind. I shall conclude by certain general applications of what we have found to the future.

CHAPTER TWO

I SHALL now ask you to consider as quietly as you can, but with as much concentration as possible, those qualities of a machine with which you are more or less familiar. If you are an American brought up against an industrial background, you will be exceptionally well fitted by experience to recognize the truth in what I have to say. I shall be dealing with very simple things, and you will not be called upon to consider any difficult technical problems or to picture anything which calls for the use of special imaginative powers. The materials with which I shall deal are as well-known to you as wood or grass or cotton or steel. I merely urge you to examine the list of machine characteristics which I have drawn up, and to add to them such other characteristics as may occur to you. Then I urge you further to test each statement I make and to reject whatever you can find good reason for rejecting, but to test very carefully your reasons for such rejection.

When I speak of a machine, I define it for my purpose as any construction designed to do things, but ultimately unable to operate without some assistance from human beings like us, though usually designed

to eliminate human labor as far as possible. Until recently, it would have been difficult for us to conceive of such a machine not put together out of steel, wood, or other materials, and not mainly harnessed and driven by steam, electricity, or other forces outside of the human organism.

Writing in 1929, I prefer to suggest that *mechanistic structures* have now reached the stage of growth in their own evolution where new forms are beginning to appear with purely abstract structures composed of specially trained habits (what the psychologists call *conditioned reflexes*) in the brains of herded men and women like you and me. I would furthermore suggest that these new abstract structures, which have shown the possibility of working at greater speed than the earlier and cruder machines, have been in a sense begotten in marriage with mankind by those earlier machines themselves.

This may sound at first like a wild and totally unsupported statement to make, but I believe that its meaning and truth will become clearer as you follow the argument I pursue. I cannot stop to enlarge upon it now, but for the time being I shall content myself with reminding you that something of the sort is already faintly perceived by the American people in certain cases, and that whenever you talk about "fighting the political machine," you are really alluding to a very good instance of what I mean. Or to

take another example from popular speech, how often have you heard an employee of a large corporation complain that he is "caught in the machinery" of its administration?

Let us now consider the characteristics of a machine as I have just defined it to you. You may disregard mechanistic structures for the present as much as you like, and limit your attention to the characteristics of such a clearly perceptible machine as a mass production factory plant, only bearing in mind that what I have to say applies in my opinion equally well to a mechanistic structure of any kind, even to one composed wholly of human beings like ourselves.

i

The machine is as accurate as possible. It must not make mistakes. Let me mention, as an illustration of this, an incident which is reported in a newspaper this morning. Recently all paper money issued by the British Treasury was superseded by one pound and ten shilling notes issued by the Bank of England. The size of the new notes is not the same as that of those which have been displaced, and accordingly new machinery has been constructed to number the notes consecutively. Unfortunately it would seem that there is a tiny fault in this machinery, as a result of which on a number of occasions two notes of the same number have been put into circulation, and on other oc-

casions it has been discovered that a serial number has been skipped over by the machine. When men went to the bank to draw out twenty pounds, the paying teller would hand them a pile of pound notes numbered, let us say, from 900,001 to 900,020, but this pile would prove to contain nineteen notes only instead of the expected twenty. This at once bred much business uneasiness in England, yet it was presumably caused by some tiny and almost imperceptible flaw in a machine. Tiny as that flaw must be, it renders the machine useless, because the machine makes mistakes: it is not sufficiently accurate.

ii

Every machine works to a predestined pattern. It is, therefore, Calvinistic in its activity and pleasing to the Puritan mentality which, as we shall see later, has a passion to predestine as well as to be predestined. The Puritan mind is flattered to be the "deus ex machina," that is to say, the God of the machine.

Now what do these statements mean? At first glance, you may be naturally tempted to exclaim: "Ah, I see now what the man is driving at. He is one of those Bohemian Puritan-baiters who are so fashionable just now, and this book of his is merely another Bolshevik attack on the men and institutions which have built up our country from the wilderness to what it is to-day." But if you think this or say this,

you will be quite wrong. I consider the Puritan mind one of the most valuable factors in our civilization, and I do not know where America would be to-day if it had had no Puritans. I wish to insist only upon the fact that Puritanism is but a single factor in our civilization, and that like any single factor its value consists in the amount of control which other factors have over it. Any good or bad quality in human nature is dangerous if left to itself.

But what do I mean when I say that a machine always works to a predestined pattern? Why drag in predestination? Is not predestination a purely theological term? By no means. Predestination means that if you once start a certain kind of operation with the intention of accomplishing a certain end, you know what that end is going to be and can guarantee that the finished achievement will be almost exactly what you intended.

If you set an accurate machine, therefore, to turn out collar buttons of a certain size and pattern, you can feel perfectly sure that the machine will not turn out hairpins or even collar buttons of a different size and pattern. You will have predestined the nature of the collar buttons which that machine has turned out.

Calvinists believe that God has predestined the way we shall finally turn out at the end of the lives which have shaped us, and similarly Puritans are inclined to

believe that what they call destiny urges them to shape their neighbors to a predestined pattern in accordance with their own views as to what God intends of human nature. Perhaps they are right. I shall be quite satisfied if you are clear as to the exact parallel I am drawing.

There is another way in which something like predestination is bound up with men and women and machines. C. E. M. Joad, the philosopher, has remarked: "Since the advent of machinery no man sees both the beginning and the end of the things he makes: he is a mere cog in a producing machine. What goes into the machine and what comes out of it are alike beyond his knowledge and control."¹

Now this statement in its absolute form seems to me excessive, but in an ever increasing degree as time goes on it is relatively true. From the point of view of an unskilled mechanic in a Ford factory, it is already very nearly true, and in some degree it is partially true of most mechanical labor. The significance of all this is surely obvious. If you spend the whole of your working life doing something whose purpose you do not understand and handling something which comes from God knows where and which is going God knows where, you are very likely to get into a mood in which you feel that the use and purpose of everything is extremely mysterious, perhaps

¹ C. E. M. Joad. "The Babbitt Warren." London, 1926. p. 8.

even inscrutable. Your whole life is devoted to doing something which you do not understand for an end which you understand even less. The intolerable monotony of such an unending operation tends to make you take the end of your work for granted as something over which you have no control. Now this is precisely the mood of those who believe in predestination.

A young Russian novelist has embodied this mood in a remarkable novel recently translated into French. Vsevolod Ivanov pictures a body of troops in an armored train fighting the Bolsheviks in Siberia. These troops have lost all effective touch with their central command. They receive orders by wireless which they obey, but they do not know who sends them. At either end of a limited length of track the bridge has been blown up, and all along the track Bolshevik irregulars are posted waiting for the train to stop for lack of food and fuel. The officers in the train know that they cannot go on forever receiving orders from they know not where and travelling backwards and forwards over the same predestined rails. Such a mood is common in factories and breeds restlessness that tends to intensify into revolt or despair, and the mood is unforgettably voiced in the words of one of these Russian officers: "We are tomorrow's corpses. You and I and all of us in the train."² I do not believe

² Vsevolod Ivanov. "Le Train Blindé No. 1469." Paris, 1928, p. 93.

that this mood is justified by the facts, but you will agree with me that it is a dangerous mood in our body politic, and by no means an unnatural one.

iii

The machine is as cheap as possible, always bearing in mind, however, the task for which it is designed. The reason for this is clear enough, I hope. It is wasteful to spend more money and labor in making a machine than is necessary, and if your competitor can build a satisfactory machine cheaper than you can, he can undersell you in the market with the goods which that machine has made for him. On the other hand, if he economizes unduly, his machine is likely to destroy valuable raw material and to slow down labor for which he is paying on a time basis, so that you can undersell him in the market.

iv

The machine has no nervous factor, or is at least designed to have none. (Frequently it has a great deal.) It transfers the nervous factor from itself to the operator, though at the same time sternly forbidding him to be nervous. However, it has no self-control, or at least very little, and the operator tends to have less and less self-control.

What do I mean by a nervous factor? Suppose that a headache or a slight distraction prevents you from

doing something as well as you might do it otherwise. Such a headache or distraction would introduce a nervous factor into your work. Suppose now furthermore that a machine has something to do, and that a little defect in quality, a little rust, or a slight weakness in its construction makes it act like that numbering machine at the Bank of England. Such a defect in the working of a machine is rather like a headache or a distraction in its effects, and I call it a nervous factor of the machine.

Now whenever a machine is made in order to do a certain piece of work, the greatest pains are taken to see that it has no nervous factor. It is always assumed that the completed machine has no such factor. Unfortunately, as we have seen in the case of the numbering machine, this assumption is by no means always correct.

Let us suppose, however, that the assumption is correct, and that the machine has no nervous factor. Are we also entitled to assume that the operator of that machine introduces no nervous factor either into the work of the machine itself or into his own life during the hours while he is tending or operating that machine?

The evidence is all against any such assumption. In the first place, neurasthenia is preëminently an American disease, so far as it is divorced from the after effects of the war in Europe. Historically, even be-

fore 1914, there was a steadily and rapidly mounting curve of neurasthenia in America, particularly in the industrial cities and towns, which in no way compared with similar curves in other countries in which there was a less rapid growth of industrialism. It is significant to note that Germany was the most highly organized industrial country in Europe, and that it was in Germany that the neurasthenic curve rose highest among all Continental peoples.

Now a nervous factor entering into work makes for irregularity, while the absence of any nervous factor makes for regularity. Bertrand Russell has recently pointed this out and suggested what it may be held to signify. "Machines have their own pace, and their own insistent demands: a man who has expensive plant must keep it working. The great trouble with the machine, from the point of view of the emotions, is its *regularity*. And, of course, conversely, the great objection to the emotions, from the point of view of the machine, is their *irregularity*. . . . Machines have altered our way of life, but not our instincts. Consequently there is maladjustment."³

An English essayist, W. F. Watson, offers an interesting illustration of this point which is familiar enough to all of us. "Stand at any busy street corner and watch the set faces of the drivers of the public conveyances. Note the stiff mechanical actions of the

³ Bertrand Russell. "Sceptical Essays." London, 1928. pp. 85, 87.

legs and arms as they manipulate steering-wheel, gears, and brake.”⁴

Let us pause for a moment and reflect on the full implications of these statements, which are made by men whose environment and daily life is far less determined by machinery than ours. First of all, Mr. Russell points out that a machine has qualities which it cannot help, and that one of these qualities is regularity. He also reminds us that our emotions have a particular quality which it is very difficult for us to help beyond a certain point, and that this quality is irregularity. Our emotions are as much a part of us as regularity is a part of the machine.

Now our emotions are, of course, intimately bound up with our instincts, just as we shall hardly stretch a point if we call regularity a kind of instinct in the machine. This regularity of the machine, Mr. Russell says truly, makes insistent demands on the operator, and its most insistent demand is that the operator shall train himself to an equal regularity.

But such an equal regularity conflicts with his emotional life, and therefore with his instincts. He may control his emotions and his instincts during working hours, but more and more he will tend to control them unwillingly. He knows that such thoroughgoing regularity is against human nature.

⁴ W. F. Watson. "The Omnipotent Machine." *Cornhill Magazine*. November, 1928.

Human nature is itself controlled by the laws of life, and therefore such regularity goes against nature itself. He is compelled to go against nature to satisfy the machine's demands, and to go against nature, day in and day out, year after year.

To deny nature is to invite disaster. This disaster takes the form of increasing difficulty of adjustment to environment. Such maladjustment on a large scale as it exists to-day in America is a menace to the security of all that you and I mean by the good life, indeed, a menace to civilization itself.

Now curiously enough a form of compensation is beginning to evolve. Men and women have a strong tendency, as we know, to imitate their environment. When the working environment of men and women is largely limited to machines, men and women tend to imitate machines. In so far as they do this, they achieve emotional relief; and emotional impulses, which would have challenged the machine at first, become gradually dulled until they are deadened completely. Mr. Watson's drivers, you will remember, had set faces and stiff mechanical actions. They showed a certain resemblance to machines. If you can get enough people like that to organize together for a common mechanical end, they will themselves tend to form what I call a mechanistic structure which will act like a machine and grow more and more like a machine every day. The people who form such a

structure will really resemble closely the atoms of a machine. No doubt the atoms of a locomotive have a private life of their own outside the locomotive's structural organism. At any rate, physicists nowadays appear to suspect something of the sort.

v

The machine is impersonal, or at least designed to be as impersonal as possible. (I suggest that it is developing a personality at our expense. Operators are often conscious of this personality. They frequently have a favorite machine as a jockey has a favorite horse.)

This statement calls for very little explanation. It stands to reason that a machine is built to do things without asking questions and without changing its activity one iota. If it could not be trusted to be impersonal to a very marked degree, incalculable factors would arise which would disturb business and manufacture very much. All the same, the machine shows some signs of what we should call personality in a human being. It seems capable of expressing approval or disapproval of its maker, of its operator, and even of the material with which it works. If its maker has not made it precisely as it wishes, it rebels and goes on strike. If its operator does not tend it exactly as it wishes, it malingers and goes on strike. The same thing happens if the material with which it works

does not satisfy it. Ask the engineer of a transatlantic liner whether his engines have personality or not, and he will tell you that they have. They even have favorite operators, and the operator has favorite engines.

As to my suggestion that the machine is developing a personality at our expense, I must ask you to be patient for the moment. The evidence for so odd a statement will accumulate gradually in the course of this book.

vi

The machine is designed to be absolutely interchangeable with its fellows, and its usefulness is commonly measured by this interchangeability in large scale mechanical operations.

Count Hermann Keyserling, for whose opinions I otherwise hold no special brief, has remarked truly enough: "In modern man, and first and foremost in the Americans, all forms have become fluid."⁵ I interpret his meaning as follows. Before the age of industrialism, every man developed an individual personality in privacy, and such a personality was a true and unique new form of life. Furthermore he made things with his own hands, shaping them with a personal interest to his own personal pattern, and such things had true and unique forms in so far as they

⁵ Count Hermann Keyserling. "The Travel Diary of a Philosopher." London, 1925. Vol. ii., p. 262.

varied individually from an abstract common pattern vaguely in people's minds.

These personalities and these things made by craftsmanship were perfectly definite. There was very little fluid element in them. They were not vague and you felt their unique qualities at once. Sometimes they were good and sometimes they were bad, and more often perhaps they were mediocre, but at any rate you could always tell them apart, and they continually gave you a fresh pleasant feeling of discovery.

Then machines were invented and natural forces and human beings were harnessed on a vast scale to make things as cheaply and quickly as possible. As the industrial age rapidly developed into what we perceive it to be to-day, what happened? In order to make things as cheaply and yet as plentifully as possible, it was found that the same things had to be made speedily in large quantities, that every possible difference had to be eliminated, and that the machines had to be made as like as possible in order that the goods which they manufactured might conform to the necessary standardized specifications. Consequently, if one machine was handling all that it could, and yet more work of the same sort had to be done, it was necessary that a second machine identical with the first should be ready to carry on.

Furthermore this interchangeable quality of machines led to the demand that men in their working

hours should be interchangeable too. A man minding one collar-button machine acquires a certain skill in doing so, and that skill tends to be employed in minding nothing but other collar-button machines of the same sort. There is a movement perceptible at present in large-scale industry to vary the routine of an operator's occupation, but it has yet to make substantial headway, and the spirit of machinery is against any such movement.

vii

If a machine proves to be sufficiently useful, it is not allowed to practise birth control. It reproduces itself as rapidly as possible until a better machine of its own type consigns it and its likes to the scrap heap. We hear a great deal nowadays about what is called efficiency engineering in America, Taylorism in Russia and France, and rationalization in Germany and England. I shall have more to say about this later on, but for the moment I am content to point out that "efficiency" is something very pleasing to the machine, in so far as it encourages the endless making of machines to make machines to make machines to supplant human beings.

Walter Meakin's instructive, though tendentious book, "The New Industrial Revolution," inadvertently makes this clear. You have only to examine the figures which he sets down as put aside for recon-

struction and for depreciation of plant in German industries during the past few years. To take a single instance, which is by no means exceptional, the gross profits of the Krupp works for 1927 were about \$14,500,000 according to Mr. Meakin.⁶ From this total about \$2,250,000 were written off for reconstruction of plant and nearly \$2,500,000 more for depreciation of plant. After deducting taxes and contributions to social service amounting to about \$6,500,000 more, the net profit was about \$3,250,000. Add plant cost to owner's profit and you get the sum of \$8,000,000. Machinery swallowed up 60% of this sum, and the owners took the rest. In other words, machinery was half as greedy again as the owners of the machines.

The question at once rises whether rationalization will benefit machines or capitalists most. If I were a capitalist, I should want to go into this matter very thoroughly. Many a manufacturer has been ruined because he could not afford to stop his machines when the demand for their products lessened, and this was long before the days of rationalization. Now that rationalization appears to be entering on a headlong career, the chances of disaster would appear to increase rapidly in direct ratio to the multiplication of new machines.

⁶ Walter Meakin. "The New Industrial Revolution." London, 1928. pp. 117-8.

viii

When a machine manufactures an article, its emphasis is entirely upon the technique of manufacture. It tells a man how to make this article and insists that he shall follow mechanistic rules only. When it manufactures a new machine, the same fact is to be observed. It works solely for the interest of the mechanical race. It has its own mechanical eugenics which are prepared to sacrifice man to its own glorious mechanical future. Man now tends to imitate these mechanical eugenics in the belief that they will contribute to his own supposedly glorious human future.

At first sight, it may appear natural and even admirable to you that a machine, when it manufactures an article, lays stress only upon technique. Surely its sole function is "to get on with its job." I wonder! If you or I were to set to work unaided to make something which should be as perfect of its kind as possible, in fact, as desirable as possible, should we concern ourselves entirely with the effort to follow certain definite rules previously laid down to a hair's breadth of accuracy, or should we not take other elements into account?

First of all, should we not seek for the most perfect bit of material we could find, test it and try it in every way until we were sure that its quality could not be

surpassed? Then should we not, if we were wise, study the special properties of this particular bit of material, try to find out how far it lent itself to one method of treatment rather than another, bring our imaginations into play, experiment perhaps a little, make discoveries about its grain and texture, and use these discoveries to make a unique object which expressed something equally unique in our own personalities? We should respect technique, of course, as part of the wisdom of the race, and be very careful not to disregard it, but some personal element in the material combining with some personal element in us would probably produce a new object which we could tell anywhere from something similar, and in which we should take special pleasure on that account.

Is it now clear to you that technique, while important, is not the only important element in making something? You must learn the rules of a craft in order to be a competent craftsman, but once you have learned them their value will depend very much upon how cunningly you are able to modify or even break them without damaging the work upon which you are engaged. There is always a human margin outside the area of technique which makes all the difference between excellent and mediocre results.

Nevertheless the machine, by reason of its nature, compels man to follow mechanical rules of technique only, and thus to assist it in producing mediocre ob-

jects. The more mediocre an object is, the less personality it has. The machine therefore floods the market with objects totally lacking personality.

Furthermore the machine insists that every new machine manufactured shall be designed solely from a technical point of view, incorporating sameness of type, and only introducing slight variations intended to make the machine's work easier and less wasteful of time, energy and materials. New machinery is bred from approved types, and disapproved types are discarded, often without any sufficiently rational attempt to assess their possible value in a machine world. In other words, machines practise eugenics with the assistance of human beings as their contraceptives and destroyers, bearing in mind always the supposed good of the machine race. The results in "efficiency" have impressed man, and human eugenics, as so far practised, seem to me a timid imitation of good machine medical and sociological practice.

ix

The machine insists on the elimination of error, which it defines as a human factor. It claims that it cannot err, and inflicts condign punishment on the erring human operator. The philosophy of the machine may be summed up in four familiar words which it applies to us censoriously: "*To err is human.*"

Not long ago S. W. Stratton, President of the Massachusetts Institute of Technology, published in collaboration with Frank Parker Stockbridge, a well-known American journalist, an article entitled "Robots," which bears out this and previous strange statements of mine to an extraordinary degree.⁷ The authority of Dr. Stratton is based on unique knowledge and experience when he records the facts. The philosophy he invokes to explain the necessity of these facts has no credentials to present which an ordinary man of reasonable intelligence would be prepared to honor after even casual examination. Nevertheless the facts he presented roused world-wide comment and led to leading editorials throughout the European press. They were regarded as a terrifying portent to civilization by the average man in Europe to judge by the flood of letters to newspapers which followed the editorials.

Dr. Stratton pointed out that there is a machine in the Massachusetts Institute of Technology which solves any problem involving the difficulties of calculus, and that it will work out for you in a few minutes mathematical results which it would take the most rapid human mathematician a year to solve. Better than that, its accuracy is guaranteed, whereas the results worked out by a human being would have to be checked and verified in the most minute detail in

⁷ *Saturday Evening Post*. January 21, 1928.

order to eliminate error. Dr. Stratton recounts the exploits of a great many machines of this type, and makes the significant comment that "they are machines with the engineer's brains built into them, *eliminating the need for thought on the part of those who direct their operation.*"⁸

But that is by no means all. Dr. Stratton, inspired by the machines whose divine nature he has so long contemplated, goes on to say: "The human machine is a poor piece of work from the point of view of engineering efficiency. Created to serve an infinite variety of purposes, it serves none of them so well as a machine can do it, except, of course, such functions as reasoning, self-perpetuation, and physiological reactions which are manifestly impossible to the machine."

You will note at once that Dr. Stratton has acquired the habit of alluding to you and me and himself as "the human machine." The machine has become the standard of reference for his thought. In this he is by no means alone among scientists, or even in a minority among American scientists, for the latter mentality approximates more and more closely every day to that of the mechanical engineer. It is important for you to recognize as soon as possible the emergence of this new dogma in American life that human nature is inferior to that of the machine.

⁸ *Italics mine.*

The dogma implies that you should worship your betters and do that which is appropriate to the state of life into which the machine has been pleased to call you. Later on I shall show you that this new dogma has a strong theological bias.

Dr. Stratton is very sure about the machine's virtues. It "cannot make a mistake; its human master can, and frequently does." Remembering the odd capers played by the Bank of England's numbering machine we are not sure that this statement is true. Dr. Stratton applies it to the calculating machines commonly used in banks. In travelling about Europe, I have had an experience which differs from his theory to an astonishing degree.

It has been necessary for me to deal at one time or another with seven European banks for considerable lengths of time. Four of these banks shared my benighted suspicion of calculating machines and did not employ them: the other three unfortunately did and still do. Of these three, one is in London, one in Italy, and the third in Switzerland. They are banks of the highest standing, but they employ machines which make mistakes. The other four banks never made a mistake in calculation, although they relied on human clerks entirely for their bookkeeping. Each of the three banks which relies on a calculating machine has made several mistakes to my knowledge, either in calculating a sum involving exchange in cur-

rencies, or merely in adding a short series of figures. These mistakes have sometimes been in my favor and sometimes in the bank's favor.

Whenever the mistake has occurred and I have pointed it out, I have been met with incredulity and an unwillingness to check up the figures by hand rather than by the machine. It has been pointed out to me on each occasion that the calculation was done by a machine, and that machines cannot make mistakes. Yet on each occasion persistence on my part has resulted in an acknowledgement of error on the part of the bank involved.

The bank's assumption on any statistical law of averages that a machine will work correctly is, no doubt, fairly sound. But the human operator of the machine is prevented from having a complete visual perception of the process which is going on. His accuracy or inaccuracy is abstract and not concrete to him. He cannot concentrate with the same accuracy while striking the keys of a calculating machine as he can if he is actually writing down and thus *seeing* the figures instead. Moreover the dogma of the machine's accuracy tends to relieve him to some degree of personal responsibility. If he could be trained to such accuracy as his own minor effort continually demands, he would be equal to a faultless linotype operator whose work was so perfect that it was unnecessary for an author to correct proofsheets.

Yet my experience of proofreading is such that I am certain such a faultless linotype operator has never existed. (In correcting the proofs, I found an error of typesetting in this paragraph.)

On the other hand, in the four English banks which abhor machinery, the clerks are in direct visual contact with figures, and what is much more important, they take personal responsibility and pride in their own accuracy. Consequently errors in calculation coming to the attention of these banks' clients is unknown. The clerks do not make mistakes: the machines which supplant them do.

Let me give you another concrete example of what I mean. I shall draw once more on personal experience. In the course of my professional labors, it is necessary for me to receive at my residence regularly three hundred periodicals. About one hundred and eighty of these are published in the United States. The others are published in England. A year ago I moved my household from England to Switzerland, and wrote to each of these three hundred publications informing them of my change of address. In England, it is customary to address mailing lists by hand. In America, it is customary on the contrary to entrust this labor to machines which sort stencils, print wrappers, fold, and finally post the periodicals which are to be sent out. The alteration of address was made correctly and immediately in the office of each English magazine.

It took four months before the first American magazine reached me with the correct address, eight months before two-thirds of the magazines were being forwarded properly, and now after a year has elapsed fifteen per cent of the American periodicals are still going to my former English address, despite repeated reminders on my part and repeated assurances that the alteration would be made on the part of the mailing departments involved.

X

The machine has no use for creativeness. It goes on with its own set job and is perfectly certain that creativeness is a regrettable human function, "the human factor." It trains its human operators and human executives to believe in the equation:

$$\text{CREATIVENESS} = \text{"HUMAN FACTOR"} = \text{ERROR.}$$

(The word *error*, you will note, is used equally reproachfully by Christian Scientists whose creed is American, and who appear to flourish best under conditions of industrial prosperity.)

Jung has recently given us an interesting example of this. After pointing out that man is not a machine in the sense that he can consistently maintain the same output of work, and that a man's one sided adaptation to environmental conditions at the expense of his

own inner world is disastrous, he goes on to say: "I have seen a drastic case of this in the person of a manufacturer who, having worked his way to a high level of success and attainment, began to remember a certain phase of his youth when he took great pleasure in art. He felt the necessity of returning to these pursuits and began to make artistic patterns for the wares he manufactured. The result was that no one wanted to buy these artistic products and the man became bankrupt after a few years."⁹

You will find the same theme recurring several times in Sherwood Anderson's novels and short stories. Later on, I shall have occasion to speak of these in order to illustrate the effect of the machine upon American art and life.

Jung has also observed how a power station imitates a waterfall and so gains possession of the latter's energy.¹⁰ I should like to extend his observation and to point out how a machine imitates a man and so gains possession of the man's energy, while at the same time most men nowadays are tending more and more to imitate the machine's energy, and so reversing a fundamental law of nature. As men imitate the machine's energy, they flatter themselves that they are thereby gaining possession of the machine energy. Unfortunately you cannot reverse a law of nature which

⁹ C. G. Jung, *Contributions to Analytical Psychology*, 1928, pp. 43-4.

¹⁰ *op. cit.* p. 47.

has to do with physics, especially the second law of thermodynamics, as even Eddington will tell you.

What really happens is that men become "possessed" by machinery in the good old-fashioned meaning of the word "possessed." The psychologist's job is therefore tending more and more, as the most superficial examination of psychoanalytic monographs will reveal, to be that of casting out devils, of exorcising "complexes."

What could be more essentially mechanical than a complex? What could be more like a factory than a standardized nation of men and women with repression for steam, autonomous complexes for machinery, and conditioned reflexes for manufacturing processes? Might not, nay, will not such a nation become one vast *mechanistic structure* like a steel works on a vast scale unless some equally strong force intervenes to restore equilibrium by setting the values of the nation's inner life in counterpoise against this monstrous regiment of machinery?

The values of a nation's inner life demand incessant creation for their self-expression. If the machine crushes this creation by stigmatizing and punishing it as error, there will be a volcanic outburst some day in our national life which will explode us to atoms. Before that outburst comes, we shall be reduced to slavery.

Captains of business and their preferred interpre-

ters flatter us by pointing out how every man, woman and child in the United States has forty mechanical slaves working for him now. In other words, machines now produce forty times the quantity of commodities which could be produced by every man, woman and child in the United States working with his hands all day long. Jung has reminded us that Rome at the beginning of the Christian era had three slaves to every two freemen, and that this slavery infected the freemen. "Every Roman was surrounded by slaves. The slave and his psychology flooded ancient Italy, and every Roman became inwardly, and of course unwittingly, a slave. Because, living constantly in the atmosphere of slaves, he became infected through the unconscious with their psychology. No one can shield himself from such an influence."¹¹

Apply this to our own situation, and ask yourself the vital question: "Am I being infected through the unconscious with the psychology of my slaves? Am I being infected with the psychology of the machine?" You must answer "yes," if you are honest, and then rouse yourself to face the problem before you.

¹¹ C. G. Jung. *Contributions to Analytical Psychology*. London, 1928. p. 173.

xi

The ideal of the machine is standardization. It must always make the same object. Each object it makes must be indistinguishable from the next object or there is "error." By extension, or by contagion, if you like, the machine imposes its ideal of standardization upon human beings. The operator must concentrate on the object made by his machine as carefully as the machine concentrates, or woe betide him! He must adjust his mind and body to the restless speed of the machine. The consumer must, and does, make the same adjustment of his mind and body to the flood of machine production. He surrenders his individuality completely to what his "slave," the machine, insists on making for him.

So acute an American observer as Edgar Ansel Mowrer has recently remarked: "Outside communist Russia, in the United States lives the only dense and progressive population that likes the idea of wearing the same clothes, living in similar houses and towns, riding in identical automobiles—and thereby permits all these things to be multiplied at ever more reasonable prices with less human labor."¹² Let us simplify this whole statement. Boiled down to a few words, it comes to this. *We are slaves of custom.* What has made this *custom* which enslaves us? Ob-

¹² Edgar Ansel Mowrer. "This American World." London, 1928. p. 96.

viously the machine. Who are we? The answer is only too familiar. *We are the machine's customers.* Not only that. The machine imperiously demands *our custom*. Individually we should starve to death in our cities if we declined to purchase its wares.

Standardization has not yet developed beyond its infancy, however much we are conscious of its rapid growth. There is every reason to be certain that the next few years will see as rapid a development in this respect as was to be observed in the Industrial Revolution when steam supplanted hand labor. Frequently veiled under the name of "simplified practice," it advanced by leaps and bounds in the United States during the war. Identified with the name of Herbert Hoover, the coming four years are likely to see a curve of acceleration in the standardization of life hitherto unknown in history, and every possible kind of economic pressure will be brought to bear to extend it as a missionary gospel over the whole industrial world outside of the United States.

Hoover in his definition of "simplified practice" was perfectly frank about it. He stated boldly: "It has nothing to do with style problems or matters of individual creation." Let me quote Walter Meakin's summary of its immediate achievements. "Under the stimulus of Mr. Hoover's propaganda, and on the initiative of the officials of his department (the U. S. Department of Commerce), conferences of manu-

facturers, distributors, and consumers were convened in many industries. By the end of 1925 no fewer than nine hundred conferences had been held, and four hundred trade groups were engaged in working out schedules of simplified shapes and sizes. These schedules covered thousands of varieties of articles, and it is only possible here to indicate the extent of the movement and its results by noting one or two typical decisions.

"Varieties of pocket-knives were reduced from 1,500 to 300; of hammers, hatchets, etc., from 2,752 to 761; of pipes and fittings from 17,000 to 610; of stoves and ranges from 2,982 to 364; of paving-bricks from 60 to 6; of spades and shovels from over 4,000 to less than 400; of blankets from 78 to 12.

"The achievement has been described by Mr. Hoover as 'one of the most astonishing transformations in economic history,' brought about by co-operation between the Government Department of Commerce and industrial leaders. The effect of these agreements within each industry on manufacturing processes was notable. It became possible to simplify mechanical equipment and to adapt it for cheaper mass production on a scale not realizable without co-operation and regulation."¹³

The preceding paragraphs offer considerable food

¹³ Walter Meakin. "The New Industrial Revolution." London, 1928. pp. 153-4.

for thought. A housewife whose stovepipe wears out appears to have one chance in nineteen of replacing it. If she cannot replace it, we must presume that she will have to buy a new stove. (Every pipe fitting now to be purchased replaces eighteen other patterns which have been abandoned.) This necessity which she feels is no doubt pleasing to stove manufacturers, but a doubtful economy to the consumer. Manufacturers of machinery are pleased as well. "Simplified practice" appears to render necessary the manufacture of new simplified machinery. The net result of the method appears to be more machinery. The process of standardization is an example of how the machine discourages birth control in its own family.

This vast new mechanical series of operations is arousing a great deal of comment in Europe, and an important aspect of this comment is political. Let me quote from an editorial in the "Journal de Genève" which appeared this morning. I should have no difficulty in matching it in some European newspaper yesterday or to-morrow.

Alluding to Hoover's recent voyage to South America, the writer remarks: "Standardization, carried abroad, quickly becomes an economic danger—and a political one also—for those whom it exploits. That is why we cannot witness without anxiety the United States launching out in this direction. We believe that it is charged with menace for the peace

of a future less far off than seems likely at first sight. Latin America has need of capital, but will it submit to the standardization of its production and to the political tutelage which would accompany it? Moreover the United States also menaces the economic situation of England. The United States is of all countries in the world that in which standardization can best succeed, and the actual moment is undoubtedly the most favorable possible moment for it in history. Even in America, however, it is far from offering the solution of all problems, particularly agricultural problems. Necessary and economical as it may be in every industrial society, it is after all only one aspect of such a society. The Americans, yielding to the genius of their race, are making precious discoveries in this field for all humanity. But in erecting standardization into an absolute system they run the risk of being its victims,—especially when the day comes on which, their export trade having developed itself, their standardized products will come into collision on the world's market with other articles whose artistic superiority or whose superiority in precision will be invincible. On that day, which is not so far off as most people think, America will have to open its gates to articles which have not been standardized,—without being sure of guarding the place that it holds, that it has already

acquired as the producer of standardized articles; the tariff will have had its day.”¹⁴

I quote this passage as significant of a certain danger which it is possible to foresee. I am not sure that this danger will take the precise form which the Swiss writer predicts. If standardized articles produce standardized people, it is very likely that standardized people will not require such precision and artistic merit as do their neighbors. But if precision and art vanish from the nation, surely this is a more terrible death than any other possible calamity.

Hoover would eliminate “unnecessary variations.” But the poet, the legislator, and the priest are unnecessary variations in such a civilization, unless they degenerate to the common level where they may be held to be harmless. When poets, legislators, and priests become harmless, life reaches a primitive level. This happened in Rome and in other civilizations. Is it to happen with us, and are the creators of America to be trampled under the hooves of Hoover’s standardization?

xii

The machine tends to do useless things and to make useless objects. It therefore becomes necessary to make the things which it does seem useful, and it becomes

¹⁴ *Journal de Genève*. 22 janvier, 1929. “Les grands problèmes économiques aux États-Unis.” By P.-E.B.

desirable to confer a fictitious usefulness, if possible, on the useless objects which it makes.

The first useless thing which it does is to waste most of the energy with which it is supplied. It wastes not only horse-power, but man-power. Man-power should be creative, but the machine discourages creation, as we have seen. If the machine is not continually employed, manufacturers know to their cost that it wastes money. If it remains unemployed long, it wastes its own substance, becomes decrepit, and has to be scrapped.

The second useless thing which it does is to manufacture goods relentlessly regardless of the limits of the market which can consume them. This is less felt in the United States than in other countries where the consuming public is more quickly saturated.

This relentless manufacture of goods tends to create a glut of essentially useless objects. Certainly an object which the consumer does not require is a useless object. Therefore the necessity arises, from the machine's point of view, of making this useless object seem desirable, and so endowing it with a fictitious usefulness. It does this by suggestion, which may take the direct form of advertising, or the indirect form of proposing to the public new ways of living which are luxuries at first and come to seem necessities afterward.

Style and fashion are invoked, and a useful object in a household is replaced by one which only differs

from what it replaces by a slight change of model. A 1928 model automobile is quickly replaced by a 1929 model, which by social pressure and emulation is made to seem a necessity. You will not find it difficult to parallel this example in most fields of industry and salesmanship. An indirect result is that objects tend less and less to be made to last. This leads to a public fickleness expressed in the restless desire of the American public for continual change which it never finds, but for which it is obliged to substitute continual motion from one place to another and galvanic stimulation with its correlative reactions.

xiii

The machine, being designed to make money for men, its passion is to make as much money as possible. Its gospel is that of "speeding-up." It imposes speed values upon the human beings who are in direct relation with it and, by extension or contagion, upon all other human beings less directly in touch with it.

Count Sergius Tolstoy relates that his father on returning from a walk one day remarked: "I have to-day discovered a new mathematical law: The quicker a man drives the less necessary is the business to which he is driving. In other words: *The rapidity of a drive is in inverse proportion to its utility.*"¹⁵

¹⁵ "Family Views of Tolstoy." Edited by Aylmer Maude. London, 1926. p. 118.

Unfortunately speed has become an American obsession, and movement is valued to a disproportionate degree which has no parallel either in past history or in any other part of the world to-day. In an authorized interview published two or three years ago in an American magazine, Edison is reported to have made the following remarks: "Automobiles have changed every detail of movement in the cities. More things are moved more miles in these days than ever before. When one contemplates the freight trains, trucks, steamships, and other means of transportation, it is hard to understand where everything comes from, where it is going, and why. . . . The values which are trucked about New York every day are enormous. . . . Interest on the money which value represents runs on every minute. That is the sort of thing many people never think of." ¹⁶

xiv

The machine's necessity for speed puts movement at a premium. Edison's observations make this clear enough, even if we did not behold the fact every moment of the day with our own eyes. Yet Edison is unable to draw any human deduction from what he sees. He says that "it is hard to understand where everything comes from, where it is going, and why." I assure you that there is no conscious irony in his

¹⁶ "The Scientific City of the Future." *The Forum*. December, 1926.

statement, any more than there is to be found the slightest trace of condemnation in his other statement that "the values which are trucked about New York every day are enormous."

Values are not intended to be trucked about. As soon as they *are* trucked about, the value decreases. It is like gold turning into lead. Values become quantities, and moving quantities at that, which are impossible to measure, far less to appreciate. They literally turn into movement, so that Edison is impelled to comment on this movement, and like a small boy wondering at the ticking of a watch, can only remark that "interest on the money which value represents runs on every minute."

xv

Continuous movement begets restlessness. This statement calls for scarcely any comment. It is surely self-evident. We hear allusions to the "restlessness of machines" every day. The phrase has become a part of our daily speech. The restlessness of American men and women is even more obvious. What other purpose is served by the automobile, jazz music, and the motion-picture? The American newspaper and magazine are edited on the principle that this restlessness of the American people must be considered before anything else.

Very few Americans have no horror of leisure, no

fear of being left alone for hours to their own devices. The national attitude is summed up in our three national sayings, "Keep moving," "Look lively," and "Watch your step." The first is a command, the second an invitation to mask our fatigue and boredom, the third a necessary warning of danger. They have all been taught to us by machinery, and I am waiting for the day when the machine, having got all that it needs from us, will brutally add a fourth to our brief collection of sayings, and teach us the order: "Drop dead."

xvi

Restlessness rapidly wears out the machine and less rapidly, but none the less surely, the human operator. In the interview from which I have already quoted, Edison makes the extraordinary remark: "'Becoming accustomed to noise' is, in reality, becoming deaf." This statement is profoundly true beyond the outermost range of irony.

Just as the restless effort of the machine wears it out rapidly, so that it rusts, clogs, weakens, and is finally scrapped for inefficiency, so the influence of the machine on American men and women like ourselves is such that all the senses are deadened, the body rusts, clogs and weakens, the mind dulls, the spirit goes out of you, and you are scrapped eventually for inefficiency and inability to adapt yourselves suc-

cessfully any longer to your mechanical surroundings.

Furthermore, the influence of the machine weakens the family, creating insoluble conflicts of an emotional nature which are passed on to the child; it weakens the collective life of a town, and so of politics; and eventually it weakens the collective life of the nation, so that a great artificial stimulus, such as hate aroused through mass propaganda, is necessary to create any national collective action on a great scale. This was clear enough to an impartial observer in America during the war.

Edison has truthfully pointed out how one of the senses, that of hearing, is deadened. Noise on a large scale is almost always mechanical. It "deafens" you. Similarly, the machine is destroying the American eye. Apart from the fact that America is the paradise of oculists, it is necessary to point out that the American eye no longer sees visually. The American has, in fact, nearly lost the ability to describe vividly what he has seen, or even to carry a remembered picture in his mind. He cannot remember what he has seen except in an abstract mechanical way.

American taste has degenerated, because American men and women have fed too long on synthetic food cooked in factories or chain restaurants. The American's sense of smell is no longer subtle. Air carries no delicate messages to his nostrils in our gasoline-laden atmosphere. We have lost our sense of touch,

except in so far as touch responds to subtleties of movement. We are good chauffeurs, but our fingers are no longer sensitive to the beauties or subtleties of surfaces, and the responsiveness of our other organs to touch becomes more and more primitive.

Thus sex tends more and more to resolve itself into jaded boredom, only roused to galvanic action by artificial thrills whose stimuli must be ever stronger and stronger for us to respond to them. Similarly, in order to enjoy alcohol it seems necessary for the average American to become bestially intoxicated.

We sum up the whole situation when we say that we want a life "with some kick in it." This is only another way of saying that our normal environment offers us no adequate stimulus or inspiration. Who can be inspired divinely by a machine?

xvii

In order that the machine may not wear out until the very last possible moment, it must harness men to its needs, who must coddle it, feed it, give it medical attention, and see that it rests properly and comfortably under the safest possible conditions when not engaged in the performance of its natural functions. They must also see that it does not rest too long. It requires men who must make sure that it is able to work with the utmost speed, smoothness, and exactness. It demands concentrated attention from men

at every moment. It revenges itself on men whose attention flags even for a second. It controls the men who are associated with it and, in order to maintain their self-respect, it encourages them to believe that *they* control it.

In a second interview Edison is quoted as saying: "All fully automatics [i.e., all fully automatic machines], on account of their very complexity, require attendants of mental capacity greatly increased over that of men who are merely parts of semi-automatics."¹⁷ Does not this suggest many things? First of all, Edison frankly alludes to "men who are merely parts of semi-automatics." He admits that in "semi-automatics" men become parts of the machine.

I would have you compare this admission with the suggestions which I have already made to you about the existence and possible future development on a large scale in our civilization of *mechanistic structures*. The semi-automatics require stupid men, and seem to be seeing to it that our educational and social system will breed a sufficiently large supply of these. The "fully automatics" require very intelligent men, presumably in greatly increasing numbers. Such men are relatively rare, and the machine cannot afford to let any of them slip.

Do you now perhaps see a motive inducing the machine to discourage art and all creative activity in

¹⁷ "Machine-made Freedom." *The Forum*. October, 1926.

other fields in order that it may have the services of the very best minds chained to its will?

When Keyserling was in Chicago, he had occasion to reflect upon this noticeable tendency in American life. "The stockyards," he says, "are a terrifyingly instructive image of what seems wrong in the aims of modern civilization. The ideal relation between body and mind would be achieved were every expression of the soul to be shown as perfectly as in the acting of Eleanora Duse. In our world it appears more and more that the whole power at our disposal overflows into one tool, with the result that this tool achieves the incredible; its owner, however, ceases to exist."¹⁸

A whole volume could be written expanding this remark, and perhaps some day I shall write it. At this moment I am content to inquire how you can continue to believe that you control your tool if it does everything and you cease to exist? It seems to me that if Keyserling's statement has even relative truth, which is all that I should claim for it, you will find that the machine owns you, and that the relation between master and slave is being reversed in a manner which vitally concerns you. It is time that you began to think about what you can do to alter this state of affairs.

You remember that mathematical machine in the

¹⁸ Count Hermann Keyserling, "The Travel Diary of a Philosopher." London, 1925. Vol. ii., pp. 334-5.

Massachusetts Institute of Technology which can solve in a few minutes equations which would occupy the trained brain of a scientist for a year. Suppose that by means of the intellectual short cuts which this machine supplies to an engineer or a scientist, he reaches in a few days conclusions based on perhaps as many as a hundred of these equations, and from these conclusions is able to construct a machine for a certain work which would otherwise have been totally beyond his intelligence or that of any other man living in the world. This is not an impossible assumption. In fact, something of the sort is bound to happen soon, if it has not happened already.

The engineer of this machine would be as unable to fathom its true properties and its true nature as we are unable so far to fathom the physical structure of the universe or the mental structure of a human brain. We know, to a certain extent,—well enough, in fact, for most practical purposes,—how to adjust ourselves to the universe and how to use our brain, but both frequently get out of hand, either on a large scale as in the Great War or in the influenza epidemic after the armistice, or on a small scale from the point of view of organized society as in individual neurasthenia or insanity.

Now no machine which we can manufacture will ever be perfect. That is obvious. It will always have defects whose nature it is extremely difficult, if not

sometimes impossible, to discover. But the gulf between the machine of the future based on complicated equations, yet apparently simple enough as a finished product, and the man who invented it without knowledge of any of the mathematical steps which took place between his first conception and the completion of the machine, will be an abyss so profound that if the machine goes wrong, and represents a power system on a great scale, the effects for humanity may well be incalculably disastrous.

This is less remote as a possibility than you may imagine. The mathematical physics of 1929 have already reached the point where, by mathematical shorthand on this scale, results infinitely remote from ordinary human experience have been reached, and the abyss between them and all previous physical conceptions is so great that the new physics is already incomprehensible to the Kelvin and Lodge type of mind, and the new physicists themselves admit that they are dizzy on the edge of the gulf which confronts them.

At this point it may be well to emphasize the steady growth in our day of what is known as "fool-proof" machinery. A "fool-proof" machine is one which will go on with its work and accomplish its purpose, whatever anybody does to it. It is a machine designed to be as independent as possible of the operator. Whenever the operator tampers with it, it makes a "de-

claration of independence." Machines of this sort are displacing the earlier and more primitive patterns extremely rapidly, and showing a rate of variation in biological growth, if I may be permitted what seems to be a metaphor, which is much more rapid than any similar known rate of variation in so-called organic species.

Such "fool-proof" machines are solely concerned with their own ends and suffer no interference. The human organisms with which they serve themselves are infected with the same spirit. Machine processes infect the human unconscious. Machinery, in so far as it is a primitive and unorganized thing from its own point of view, that is to say, in so far as it has no complex organic life of its own, requires more and more organisms to do its work properly.

A disorganized human mind is useless to society. A machine imperfectly related to other machines will never accomplish work on a large scale. Any factory superintendent will tell you that. Therefore many machines must be organized so that the work of each fits into that of all; and since the resultant work is predestined, so the new machine solidarity, the new machine society, is organized along predestined lines.

This new society of machines requires that its human servants shall think along similarly predestined lines. If human machine-tenders showed caprice or free will in their relation to machines, they would in-

roduce incalculable elements of eccentricity into what the machines had to do. This, in turn, would break up the harmony of the machine structure,—of the organized machine society. It therefore becomes important for the machine to build up a certain human solidarity. Employers and capitalists serve machinery in one way, labor serves it in another.

From the point of view of what the machine wants, it would undoubtedly be more satisfactory if the class division which these two groups represent disappeared. Human slavery to the machine would then be complete. But so far human nature has proved refractory to this desire of the machine. Labor has been quite as refractory as capitalism. Under these circumstances, the best that the machine has been able to achieve is to build up two mutually exclusive solidarities which conflict, no doubt, but whose opposition to each other is such that the machine does not greatly suffer from it.

The machine continually suggests to labor: "You must organize against capitalism." At the same time it is continually suggesting to capitalism: "You must organize against labor." The results of the machine's suggestion are visible everywhere. Meanwhile, the machine's development is continuous through this very clash of opposites.

Labor's hostility to capitalism induces capitalism to develop the machine as a more satisfactory slave.

Capitalism's hostility to labor induces labor to indulge in "ca' canny", and this again encourages machine-breeding to make up for lost human energy.

I would suggest to both capital and labor, in so far as they represent human rather than mechanical values, the slogan: "*You must organize against machinery.*"

Later I shall make my suggestion more clear. In its present form it is, of course, impossibly absolute, and if indulged in a mood of puritanical zeal would end in disaster.

xviii

The machine is hungry for power. It needs endless power. Hunger begets greed, and greed begets power. A machine's rapidly acquired habit of power enslaves men. First of all, it enslaves the men who are most closely associated with it.

Before the advent of the machine on a large scale, that is to say, before the success of the Industrial Revolution, there were no basic industries. There were however, three basic occupations,—those of the farmer, the shepherd, and the builder. These three basic occupations corresponded to man's three basic physical needs,—food, clothing, and shelter.

To-day we commonly speak of the basic industries rather than the basic occupations, and our interest is directed most purposefully toward the former at the

ever increasing expense of the latter, as food shortages and housing shortages in the recent past bear witness.

The basic industries are also three in number, and every one agrees in naming them. They are the coal industry, the iron and steel industry, and the chemical industry. Now it is an interesting fact which I have nowhere seen pointed out, that none of these are basic for man, but that *all three are basic for the machine*. The machine must be served. Coal, steel, and chemicals, and all that these release are the basic physical needs of the machine. The parallel is perfect, with the proviso that electricity is replacing coal as a vitamin in the machine's diet.

We have been so accustomed to organizing our social structure in such a way as to conform to the machine's diet that the machine's new craving for electricity and satiation with coal is causing grave distress in more than one industrial country. You have only to look about you in America and Great Britain to see what I mean. The machine must be fed with whatever will most contribute to its productive power, and in appeasing the machine's hunger man's distress is not to be reckoned with. Man is valued no longer for what he is, but for what he can produce.

The machine, by such a standard of values, is worth thirty or forty men. It is an artificial man which can do thirty or forty men's work. America is conscious of the discrepancy, and psychology has been set the

task of assessing human possibilities from this mechanical point of view. A machine's conditioned reflexes make for intensity in production. The machine is bred like a race horse to do one job well, and any factors in it which make for variety are rapidly bred out of it.

Signs are not wanting that the machine has proposed to psychology the task of breeding men in a similar way. If mankind can be bred like a race horse to do one thing—machine-tending—perfectly, it will be at the expense of all differentiation of personality, and so of all humanity. Behaviorism, the fashionable new American psychology, seems to be endeavoring to respond to this machine demand, and by concentrating on a few conditioned reflexes in the child, apparently hopes to breed predestined machine-tenders who will be as like machines as possible, responding as they will only to a few predetermined stimuli. I shall have more to say on this subject later on. Meanwhile ask yourself the question: "Do you want your children to be synthetic men and women?"

Again, the vogue of psychoanalysis, as irresponsibly practised in America by dubiously qualified men and women, lays undue and dangerous stress on the necessity of "adaptation to environment." Why bestow upon environment such magic power? Complete adaptation to the present American environment can only mean complete adaptation to the machine. To

fulfil the psychoanalytic ideal, such adaptation must be complete. While the average psychoanalyst obviously does not realize the machine implications of his treatment, it is nevertheless high time that they were pointed out to him. To adapt yourself completely to the machine in our present civilization means to identify yourself with it. Such a surrender is suicide, the act of either a coward or a fool. Whatever peace it may give you will not descend to your children.

If you are an Adlerian, I can only suggest that you are substituting one will-to-power for another, and that the new machine will-to-power is a far more vast and incalculable force than the old one which you may have dispersed. If you are a Freudian, I suggest that you are substituting a mechanical sex imperialism for a human one, and consequently a relentless power for one that is after all humanly variable. If you are a follower of Jung, I suggest that you are substituting an incalculable new collective unconscious with an unfamiliar mythology for the old collective unconscious whose mythology after all bears the stamp of the wisdom and accumulated experience, as well as the primitive superstition, of the race.

For adaptation of ourselves to environment, is it not high time that we began thoughtfully and constructively to substitute adaptation of environment to ourselves? Democracy points that way, whereas adaptation to the machine (in America, MACHINE =

ENVIRONMENT) means surrender to an imperialism over which we have entirely relinquished our control.

xix

The machine's hunger to use power and to create more power for itself to use, encourages mass production. It encourages this hunger and this mass production in the men who claim to be its owners. This mass production takes two forms. The machine engages in mass production of objects, and it demands the mass production of human beings.

It values the mass production of human beings for two purposes of its own: first of all, to supply operators closely associated with it; secondly, to supply human beings in ever increasing numbers to consume its products. There is one apparent exception to this law. It flatters its so-called owners by telling them that they are gods in human form, but at the same time, not wishing too many of them, it appears to encourage birth control in this class only.

I make this suggestion tentatively, because the situation appears to be altering somewhat in this respect. Birth control has begun to spread more widely through the population in industrial countries, and there may be a possible relationship between this and the unemployment problem.

The machine has developed to a point where it

needs fewer tenders, and the mechanistic structure may be perceiving that unoccupied human beings who depend upon it for their livelihood are a possible menace to its future. Where mankind itself is baffled by the population problem, we may well suppose that the mechanistic structure will be confused, for it has but an elementary mind based on certain conditioned reflexes, while its policy is really directed by a blind will whose purposefulness can hardly reason about policy.

At present, the policy of the mechanistic structure appears to be to manufacture for consumers. But if production ever becomes an end in itself, a sacred ideal, and in fact a religion (a tendency toward which all present indications seem to point), the consumer may tend to become correspondingly less valued as a necessary element in the process. This was certainly observable in munition manufacture throughout the world during the great war.

For the present, all we can do is to agree with Gareth Garrett when he says that "modern life has become so involved in a mechanical spiral that we cannot say for certain whether it is that we produce for the sake of consumption or consume for the sake of production."¹⁹ I should qualify his statement however, so that it reads: "Modern life has become so involved in a mechanical spiral that we cannot say

¹⁹ Gareth Garrett. "Ouroboros." London, 1927. p. 22.

for certain whether *the machine* manufactures for the sake of consumption or consumes power for the sake of manufacture.”

XX

The machine imposes conformity, first of all as an ideal, and then as a social necessity. Its own life depends on conformity, and it relentlessly insists upon it. This conformity is imposed in at least three directions. Men closely associated with the machine must approximate as nearly as possible to its rhythm, and do the same thing all the time at the same speed. This speed is indicated by the insatiate hunger of the machine. Secondly, the objects it makes being all alike, it desires that the consumers of these objects shall be all alike, as otherwise they might not choose to consume the standardized article. Thirdly, it demands uniformity from all of its so-called owners on penalty of loss of ownership. Were they to think and act differently from one another to an appreciable degree, incalculable elements would arise, and the life of the machine would be menaced.

By this time you are beginning to wonder about my sanity. You are thinking: “Yes, a good deal of what this chap says is very sensible, no doubt, but he seems to think that the machine is alive, that it can think and reason and do what it likes, that it is a kind of man, and that it probably has a soul. He seems to take

the play 'R.U.R.' seriously, and to believe that robots are coming who will revolt one day and run through the streets like gun-men shooting us up. No, this man has lost touch with reality. I am very sorry for him, but they will have to lock him up soon."

Of course, I don't believe anything of the sort, but I claim that unconsciously you do. You have pinned so much faith on machines that you have largely surrendered your own minds and your own wills to them, so that your minds and wills are becoming less and less your own and more and more extensions of the machine. In other words, they are splitting off from your individual personalities and identifying themselves almost entirely with machine processes, not only in your work but also in your play. If this tendency goes on much longer, you will begin to think in a machine-like way and to act entirely in a machine-like way, to organize yourselves as you have organized machines, to become more and more alike, and finally to reach the point where you will feel that there is not much difference between you and a machine. To drive my point home in a novel way, I am assuming that you have completely arrived at this condition already, and am accordingly showing you how your mind would work to save yourself when that point had been already reached.

If that day ever comes, you will be the robots. It is you who will revolt, and it is against the ma-

chines who are your masters that you will revolt. But you will be dependent on them, and after you have destroyed them, you will be helpless and die off like flies, because you will have lost the tradition of helping yourselves. All the natural human faculties will have become atrophied through disuse, the tradition of craftsmanship and hand tillage will have been lost, and in the night which ensues, your civilization will have every chance of disappearing from the earth leaving no traces but ruins behind.

| The defeatism of a Spengler anticipates some such conclusion because he does not believe that you can master the machine. In fact, some sadistic urge, probably based on German war psychology, urges him to encourage Western civilization to gallop along its present course, and to develop engineering at the expense of all other forms of culture. He would drive us to surrender to the machine because of his own despair, as a man perched on the edge of an abyss from which there is a safe enough retreat feels impelled to jump off into the gulf below. I have greater faith in man's creative will than to preach any such doctrine, while fully conceding its dangerous attractiveness. Live as dangerously as you like, but live dangerously for creative human ends. |

Meanwhile be thoroughly suspicious of the mysticism of the machine. Its content is thoroughly primitive, so primitive that a new mystical religion

is born in America every day, and comes to you as an impersonal and mechanical experience over the radio. If you want to see the effect of such a primitive mysticism on a captain of industry, read Henry Ford's dialogues with Ralph Waldo Trine in *McClure's Magazine*.²⁰

The very interview with Edison from which I have been recently quoting is entitled "Machine-Made Freedom." The American people, wearied in mind and body by the machine, is being continually taught that the machine is what gives it freedom. The machine gospel is even officially taught in our schools to the non-Anglo-Saxon races under color of "Americanization."

Americanization, as any observer quickly discovers, is a violent educational process designed to obliterate all the rich deposit of memory and racial tradition which the immigrant brings to our shores. This deposit of tradition is the wisdom of his race slowly acquired through endless centuries of development and differentiation. It is what makes him a man. It is the very essence of his life as a social being.

He is taught to despise this wisdom as old-fashioned and, if he is a child, to despise his parents as old-fashioned. The lesson, it seems, has been well learnt. For his racial tradition a thin wash of sentiment and the gospel of standardization and speeding-up is sub-

²⁰ November and December, 1928. January, 1929.

stituted, and eventually he is turned into reasonably satisfactory machine fodder. The ideal proposed to him is that of "getting on." Every boy has a chance of being President of the United States, or better still, President of the Bethlehem Steel Corporation. To put it brutally, he is corrupted with promise of money and power.

The man whose purposive consciousness in life is devoted to the pursuit of these two objects exclusively is a dangerous imperialist. His imperialism may be political, financial, industrial, religious, or whatever he likes. It may even be limited to imperialism in his own family circle, but the will-to-power is always there. When frustrated by circumstances, it turns to a sense of inferiority and brooding injustice, but it is none the less imperialistic on that account.

The successful imperialism of the capitalist and the frustrated imperialism of the communist in America are essentially the same. Ask any psychoanalyst whether he detects any essential difference in the imperialistic neurosis of a communist or a capitalist. He will find a difference in intensity perhaps, because the communist has suffered from more repression in the American environment, but the same general attitude will be common to both men.

The evil effects of enforced Americanization are clearly to be seen. Its necessity from a machine point of view may not be so clear. The machine mind re-

quires that all newcomers to its industrial society shall be standardized like the articles which it manufactures, in order that they may be disposed to consume the machine's standardized products and to serve the machine's need of standardized tenders.

The clearest word on the whole subject has been said by Keyserling, a man whose keenness of apprehension I admire as much as I deprecate his personal philosophy, which is based on another very dangerous kind of imperialism. "What is terrible in Americanism," he says, "is that it makes a man a pauper. Just as it reduces all values to the one of quantity, so it reduces the whole soul to one apparatus for the purpose of making money. It thus pushes man back to the level of the lowest animal. If one regards the facts in this light, Americanism seems something so awful that one might suppose it to be harmless. As a matter of fact, it possesses an enormous power of attraction, undoubtedly the greatest of its kind in our day. It possesses this power firstly because every one cares for success, and the American formula of life is most favorable to it; the man who loses no time with ideals, ideas and feelings, who does not know any mental and moral inhibitions, gets on the quickest. But this is not the chief of its powers of attraction: this depends upon the fact that in the American organization even the meanest fellow becomes conscious of the fullness of his existence; this formula is so nar-

row, so limited, that it gives tension to every one's vitality. And this implies a fearful danger; to-day a low condition is held up to humanity as the highest ideal. If this ideal is not dethroned soon, it leads inevitably to barbarism, and not to temporary but to permanent barbarism."²¹

xxi

The machine is in continual warfare with other machines which make a slightly different article. The result is competition, first of all between machines, then (by an appeal to human pride) between those operators most closely associated with them, and finally between their so-called owners.

The machines in one factory compete with those in another for increased and more rapid production. The operators are set against one another in competition on the grounds of speed and efficiency. Mechanical operations are timed, and the time required is reduced little by little. Machine output is even calculated by "kiloman hours," which suggest to the most innocent mind another meaning, "kill-a-man hours." Finally, there is competition between the machine's so-called owners which takes the form of high pressure selling campaigns.

²¹ Count Hermann Keyserling. "The Travel Diary of a Philosopher." London, 1925. Vol. ii., p. 383.

xxii

One result of this is continual attrition. The machine disintegrates material, atomizes it, levels it. When its speed is greatest, its restlessness greatest, and its competition with other machines greatest, it tends to be careless about the quality of the material it employs, and only demands uniformity in any given relative quality of that material.

Furthermore, it disintegrates human nature, atomizes it, levels it, grinds all men and women down to the same standardized neutral character. When its speed is greatest, its restlessness greatest, and its competition with other machines greatest, it tends to be careless about the quality of the human intelligence it employs and only demands uniformity in any given relative quality of that human intelligence. Remember Edison's words about "automatics" and "semi-automatics." They have a very real application here.

Machinery having successfully discovered how to atomize man in America is now inducing man to try splitting the atom. If man succeeds, it would be as well for him to have acquired power over himself and the machine first, or it will be difficult to prophesy what the machine mind will do with the discovery. My friends Robert Nichols and Maurice Browne have already offered you a few suggestions

as to future happenings in such an event in their play, "Wings Over Europe."

Meanwhile Edison has brutally remarked: "No man should rail against machine-power. It is application of good fertilizer to industry."²² But who is the fertilizer, Mr. Edison? Your neighbor and perhaps yourself. We are all chemically changed by machinery. And are you sure the machine has rotted us enough yet? The French call machine-men androids. Are we to give the androids more tabloids?

xxiii

The machine, as we have seen, grows more and more careless about quality. As a result, veneer makes its appearance. Machine-made objects have veneer for two reasons. The first reason is to conceal defects and poor quality.

xxiv

The second reason is that competition at this stage requires self-advertising, and it is easier to advertise a veneered product than an unveneered one. The machine imposes self-advertising on its so-called owners, and they create a new and vast *mechanistic structure* of advertising designed to push poor useless goods on the consumer indifferent to them.

As Mowrer has pointed out, "we fall easy prey to the priests of advertising. Where the acquiring of

²² "Machine-Made Freedom." *The Forum*. October, 1926.

things is a religion, the offering of them is sacerdotal. There is a theology of advertising. There is a logic and a catechism. To saddle the public with useless articles, to create an unnatural demand for them, to scrap the still sound article and purchase the ever less durable novelty, to keep the styles moving—such are the aims pursued by advertisers with an almost missionary zeal.”²³ This sacerdotal function is reverently referred to as “Service.”

It is service, and it is a priesthood, but whom does it serve and before what altar does it burn sacrifices? What divinity is expounded in its theology? The god of the machine!

In the early days of American psychoanalysis, we heard a great deal about the danger of suppressed desires, but I would call your attention to the far more imminent and deadly peril of totally unsuppressed desires created by the machine which is supposed to be our slave. Listen to President Stratton of the Massachusetts Institute of Technology once more. “The plain fact is that there are not enough people in America, available as workers, to produce the things which we—the workers included—desire as consumers, without the aid of Robots; there never have been. And our consumer needs are steadily increasing at a faster rate than our supply of labor.”²⁴

²³ Edgar Ansel Mowrer. “This American World.” London, 1928. p. 97.

²⁴ “Robots.” *Saturday Evening Post*. January 21, 1928.

President Stratton, you will note, confuses the consumer's needs with the consumer's desires, and appears not to realize that the consumer's desires have been artificially stimulated by national advertising, and in most cases even artificially created. It is true that a desire which becomes a national desire may by external social pressure be turned into something very like an individual need, but here again the external social pressure is caused by national advertising. The advertiser knows very well how to urge you "to keep up with Mr. and Mrs. Jones."

At this stage of my argument I shall not discuss advertising further. I shall have a great deal more to say about it when we come to discuss the American short story.

xxv

The machine scorns intelligence beyond a certain point. The use of excessive intelligence would bring in the human factor, nay, even creativeness, which we have seen to be "error." If the consumer were more than moderately intelligent *qua* consumer, he would refuse the machine's inferior product. Mass production and mass consumption hypnotize intelligence. To study their effects, we must depart from individual psychology and consider crowd psychology. If you are only one man in a crowd listening to a clever orator, your critical response to his speech will

be far less intelligent than if you were alone in a room with him and listening to what he had to say. I suggest that it behoves you to respond to advertising as if an equal were talking to you privately, and not as if you were being addressed by a stump orator who is skilled in playing upon the prejudices of a crowd.

xxvi

The machine lacks responsibility; at least, it entirely refuses to assume responsibility. This lack of responsibility tends, by extension or contagion, to communicate itself to those closely associated with the machine. The individual operator tends to shift his responsibility to the next man whenever it is possible, and if the nervous tension or the man's resentment is too great, human nature dictates to the operator a policy of "ca' canny" or revolt.

It is self-evident that a machine is unlikely to assume responsibility. The average man will say that such an assumption would be absurd. Bearing in mind, however, the tendency of the machine to borrow our brains and personalities, I should not be too sure about that. What it really does is to impart its own form of organization to us.

If you are a small stockholder in a corporation, what responsibility for the policy of that corporation can you possibly assume? Or if you, or a few of you

who are close associates, are majority stockholders in the same corporation, you will discover that your policy is profoundly modified by the machines of your competitors.

If you are in control of a monopoly, you will be in little better case. You will have a tremendous *sense* of power, but it will be your machines and the mechanistic structure of your organization which will really have the power of determining the corporation's principal actions. You, however, will be lost in the intricacies of the structure, called upon as the controlling executive to make decisions which have been unduly simplified for you by your organization, and really chained like a galley slave to the predestined course which the momentum of your business with all its real mechanical inertia traveling along a geodesic line prescribes to you. Remember how closely the machine is bound up with predestination, once it is given its head.

In recent years, this irresponsibility of the machine and of such a mechanistic structure as the corporation has taken on a curve of increasing momentum. The speed of its anarchic gallop is rapidly approaching the point where it is becoming exceedingly difficult for any one human mind to grasp and foresee the future of machine control. William Z. Ripley a short time ago brilliantly demonstrated one form of this new irresponsibility in his book entitled "Main Street and

Wall Street.”²⁵ I refer you to it for an excellent example of the confusion which is beginning to reign among such mechanistic structures on the grand scale as big business represents.

The system of preferred, no-par, and non-voting stock issues, the intricate web of holding companies holding other holding companies which hold corporations holding other corporations has passed the point where it can be fully understood by the executives of any corporation involved. Abstractly, it is probably only grasped completely by the two large mechanistic structures attached to such a corporation and known as its legal and accounting departments, but not even such a legal or accounting department could for a moment profess to grasp the similar organization of a competitor entangled in an equally intricate system of secret windings.

If this is beyond the minds of those most intimately associated in an executive way with such a corporation, how can we expect that national principle of order, regulation, and adjustment known as government to have more than an inkling of all the secret implications involved? Without something more than an inkling, I would ask you furthermore how we are as a nation to control such almost mystical powers. The American people has conferred these powers

²⁵ Boston, 1927. See also “The Power Monopoly,” by Gifford Pinchot. The Author, Milford, Pa., 1929.

upon machines and mechanistic structures, and these mechanistic structures have actually succeeded in immobilizing and mechanizing their so-called owners and directors to the point where the latter are bewildered by the dizzy complexity of determinism in which they find themselves involved.

For the moment, of course, they are reasonably safe, because the wheels of all this administrative machinery are human beings each of whom understands fairly well his individual task of control and his general relation to his associates. Each of these human wheels has a picture under his eye very much like a sheet of an airman's map of the country. The scale of these maps, however, is of necessity so large, that if they were all pasted together no human eye could realize the picture as a whole, except in a uselessly simplified form in which all significant detail was lost. Yet the essence of all complex machine organization is precisely *the significant detail*.

For the moment the human wheels are reasonably loyal to the central structure, because this structure is new and exciting to the overstimulated mind. Suppose, however, that some unforeseen accident or novel development of power should sap this loyalty, or remove the irreplaceable subordinate expert from his position of unique knowledge. What would become of the structure then? Revolution or war on home territory would be such an unforeseen accident, and

in a sense any new basic application of a scientific discovery is an equal danger to such an intricate organization, for every minute physical and nervous process of such an organization is carefully determined.

May I be permitted to quote some remarks of the English philosopher, F. C. S. Schiller, made in 1924 at a time when the process I have just described had by no means reached anything like the climax of confusion which is visible in America to-day? "The present economic chaos in the world," he says, "has been indirectly brought about by the policy adopted by the professors of economics forty or fifty years ago, to suit their own convenience. For they then decided that they must escape from the unwelcome attentions of the public by becoming more 'scientific', *i.e.*, they ceased to express themselves in plain language and took to mathematical formulæ and curves instead; with the result that the world promptly relapsed into its primitive depths of economic ignorance. So soon as the professors had retired from it, every economic heresy and delusion, which had been exposed and uprooted by Adam Smith, at once revived and flourished. In one generation economics disappeared completely from the public ken and the political world, and the makers of the Peace Treaties of 1919 were so incapable of understanding an economic argument that not even the lucid intelligence

of Mr. Keynes could dissuade them from enacting the preposterous conditions which rendered impossible the realization of their aims." ²⁶

While I am not prepared to support Adam Smith's infallibility *contra mundum*,²⁷ Schiller's main point is well-taken. If this has happened in the green wood, what will happen in the dry. There is a vast amount of dry timber about, as the world discovered to its cost in 1914.

The machine has only one contribution to make, so far as I can perceive, to the solution of our difficulties. I will leave you to estimate its value. As usual, Edison is its mouthpiece. "Civilization consists of a lot of people in one place,—plus a policeman. But that policeman must be a scientific product, not a hit or miss affair." ²⁸ Edison's definition of civilization would no doubt amuse Plato or Shakespeare or Einstein, but it is certainly a very fair definition of the way the American people is tending, so long as it surrenders its personality to the machine.

Civilization without personality is very much like Edison's picture of it, and his definition has the merit at least of being precise. It does not name the policeman, to be sure, but when he says that "that policeman must be a scientific product," he gives us a toler-

²⁶ F. C. S. Schiller. "Tantalus." London, 1924. pp. 31-3.

²⁷ See Thorstein Veblen's criticism of Adam Smith in "The Vested Interests and the Common Man." New York, 1919. pp. 26-31.

²⁸ "The Scientific City of the Future." *The Forum*. December, 1926.

ably broad hint. The policeman is the machine. The machine, it would seem, is ambitious to become a plantation overseer.

xxvii

The machine's lack of responsibility causes the death of craftsmanship, and begets scorn of creativeness and hatred of art. Henry Ford is reported to have exclaimed: "History is bunk." The death of craftsmanship is obvious enough. Where so-called craftsmanship survives, it is "arty." Chippendale would not have admired Roycroft furniture. The scorn of creativeness and hatred of art is masked to a certain extent. Croesus patronizes the arts, we are told, and certainly he appears to spend a great deal of money buying pictures. Herodotus tells us, however, that when he showed Solon over his treasure house, that wise man did not seem impressed. I am not aware, moreover, that Gaston Lachaise, America's greatest sculptor, has yet been given a commission for a public building despite his monumental style.

xxviii

The machine lays a strong emphasis on the value of time. "Time is money." By emphasis on time and on concentration of an extreme sort on the machine and the object being made, space is scorned. Edison, ever thoughtful, has something to say on this subject

as well. "Time is really the only capital that any human being has, and the one thing he can't afford to lose."²⁹

xxix

Consciousness of space being a bad habit, the machine will not tolerate spaciousness in man. Spaciousness means leisure, free time. Leisure is idleness, and free time releases men from the machine. It is also likely to release creative activity in most people.

The machine has taught us Americans to fear leisure. In no other country in the world is leisure feared to such a degree. The American man, woman, and child all dread being left alone. If you are left alone, you must fall back upon your own resources. In other words, you must face yourself and see who and what you are. To do so in our industrial environment would be to make a discovery of impoverishment which would be too terrible.

Every American must talk to somebody when he is not busy, preferably a stranger or at least some one who does not know him too well. Every man who has traveled in a smoking car on an American train knows very well what I mean. Yet this loquacity has no relation to true conversation. There is little thought, almost no free give and take. A man buttonholes you and discusses the weather, prohibition,

²⁹ "The Scientific City of the Future."

his clever business deals, automobiles, radio and cross-word puzzles. He is very likely to bore you by outlining crudely the plot of a story in the *Saturday Evening Post* which he has just read. He is really desperately lonely.

When his hours of leisure come, he turns to the machine for his amusement. He calls his automobile his "machine," and speaks of it in terms of real affection. He is as proud of it as he is proud of his wife and children, and that is saying a great deal. He takes his family out riding, and his pleasure is not in the landscape which his car obscures in a cloud of dust, but in the speed at which he is traveling. This speed reflects his restlessness which he has caught from the machine. His automobile panders to this restlessness.

If he is not motoring, you will find him sitting joylessly at the moving-pictures. He tells you that he has to "kill time somehow." That is his revolt from the machine. He has lived in time rather than in space all day, and now in revenge he desires to KILL TIME. The motion picture obliterates time and space for him, especially space. Being the product of a mechanistic structure, its special interest is to murder space while he murders time. Between them they are tolerably successful in murdering leisure.

The "tired business man" and his wife collaborate with the gramophone and the radio and the cross-word puzzle in a similar massacre of all that makes

life worth living. They always forget one thing. The only justifiable object of labor is to redeem leisure,—creative leisure which brings all good things to man,—beauty and truth and love and holiness. Quality is to be perceived best in leisure, as quantity is to be perceived best in mechanical labor. The machine has taught us to revere quantity rather than quality in everything. *Are we not the greatest nation in the world?*

xxx

Without free leisure and spaciousness, creativeness is impossible. The machine knows its enemies. They are the saint, the hero, and the artist. It offers mankind a new mysticism of material things. Those who accept this mysticism find that it is a mechanical substitute for religion ("just as good"), and call it "Service." They never inquire what deity they are serving.

The mind which does not inquire is a mediocre mind, and when the machine urges us not to inquire, it is urging us to become a mediocre nation, that is to say, a nation of mediocre people. It urges us to be cheap laborers and cheap thinkers, and offers us material goods to bribe us to do what it desires. It has already taken us up a high mountain and offered us the kingdom of the earth if we will but bow down and adore it. And we have bowed down and adored.

Let Edgar Mowrer complete my diagnosis. "What we do offer—in ever more limited amounts—is entrance into our society and a share of its benefits to all who see things as we do. The American scene undoubtedly comes nearer to the ideal of the average man and woman—gives greater scope to the average powers—than any more mature social *milieu* (whether the price we pay for this is not too high is another matter). But if our ideal is really the 'greatest happiness of the greatest number,' it is difficult to see how we can do better than this. It is my conviction that the American life, with its numerical and quantitative and machine-made standards, its carelessness of the finer distinctions and ambitions of the spirit, its generous materialism, its firm belief in Natural Equality, adequately represents humanity at the present moment. This life is the unconscious yet logical creation of a mediocracy, here, for the first time in a thousand years, dominant in a developed society." ³⁰

xxx1

Let us now gather together the strands of our analysis of the machine. I shall recapitulate briefly the thirty characteristics of the machine and the mechanistic structure which we have already considered.

³⁰ Edgar Ansel Mowrer. "This American World." London, 1928. p. 103.

1. The machine is as accurate as possible. It must not make mistakes.

2. It works to a predestined pattern. It is, therefore, Calvinistic in its activity and pleasing to the Puritan mentality, which has a passion to predestine as well as to be predestined. The Puritan mind is flattered to be the God of the machine.

3. It is as cheap as possible, always bearing in mind, however, the task for which it is designed.

4. It has no nervous factor, or is at least designed to have none. (Frequently it has a great deal.) It transfers the nervous factor from itself to the operator, though at the same time sternly forbidding him to be nervous. However, it has no self-control, and the operator tends to have less and less self-control.

5. It is impersonal, or at least designed to be as impersonal as possible. (I suggest that it is developing a personality at our expense. Operators are often conscious of this personality. They have a favorite machine as a jockey has a favorite horse.)

6. It is designed to be absolutely interchangeable with its fellows, and its usefulness is measured by this interchangeability in large scale mechanical operations.

7. If a machine proves to be sufficiently useful, it is not allowed to practise birth control. It reproduces itself as rapidly as possible until a better machine of

its own type consigns it and its fellows to the scrap heap.

8. When it manufactures an article, its emphasis is entirely upon the technique of manufacture. It tells a man how to make this article and insists that he shall follow mechanistic rules only. When it manufactures a new machine, the same fact is to be observed. It works solely for the interest of the mechanical race. It has its own mechanical eugenics, which are prepared to sacrifice man to its glorious mechanical future. Man now tends to imitate these mechanical eugenics in the belief that they will contribute to his own glorious human future.

9. It insists on the elimination of error, which it defines as a human factor. It claims that it cannot err, and inflicts condign punishment on the erring human operator.

10. As a corollary to this, it has no use for creativeness. It goes on with its own set job and is perfectly certain that creativeness is a regrettable function, the "human factor." It trains the human operators and human executives to believe in the equation:

$$\text{CREATIVENESS} = \text{"HUMAN FACTOR"} = \text{ERROR.}$$

11. As a further corollary, its ideal is standardization. It must always make the same object. Each object it makes must be indistinguishable from the next object or there is "error." By an extension, or

by contagion if you like, the machine imposes its ideal of standardization upon human beings. The operator must concentrate on the object made by his machine as carefully as the machine concentrates, or woe betide him! He must adjust his mind and body to the restless speed of the machine.

12. It tends to do useless things and to make useless objects. It therefore becomes necessary to make the things it does seem useful, and it becomes desirable to confer a fictitious usefulness, if possible, on the useless objects which it makes.

13. Being designed to make money for men, its passion is to make as much money as possible. Its exultation is therefore in speed. Its gospel is that of "speeding-up." It imposes speed values upon the human beings who are in direct relation with it, and by extension or contagion, upon all other human beings less directly in touch with it.

14. Its necessity for speed puts movement at a premium.

15. Continuous movement begets restlessness.

16. Restlessness rapidly wears out the machine and less rapidly the human operator.

17. In order that the machine may not wear out until the very last possible moment, it harnesses men to its needs, who must coddle it, feed it, give it medical attention, and see that it rests properly and comfortably under the safest possible conditions when not

engaged in the performance of its natural functions. They must also see that it does not rest too long. It requires men who must make sure that it is able to work with the utmost speed, smoothness, and exactness. It demands concentrated attention from men at every moment. It revenges itself on men whose attention flags even for a second. It controls the men who are associated with it, and, in order to maintain their self-respect, it encourages them to believe that they control it.

18. It is hungry for power. It needs endless power. Hunger begets greed, and power begets power. A machine's rapidly acquired habit of power enslaves men. First of all, it enslaves the men who are most closely associated with it.

19. Its hunger to use power, and to create more power for itself to use, encourages mass production. It encourages this hunger and this mass production in the men who claim to be its owners. This mass production takes two forms. The machine engages in mass production of objects, and it demands the mass production of human beings. It values the mass production of human beings for two purposes of its own: first of all, in order to supply operators closely associated with it; secondly, in order to supply human beings in ever increasing numbers to consume its products. There is one exception to this law. It flatters its so-called owners by telling them that they are gods

in human form, but at the same time, not wishing too many of them, it has hitherto encouraged birth control in this class only.

20. It imposes conformity first of all as an ideal, and then as a social necessity. Its own life depends on conformity, and it relentlessly insists upon it. This conformity is imposed in at least three different directions. Men closely associated with the machine must approximate as nearly as possible to its rhythm, and do the same things all the time at the same speed. This speed is dictated by the insatiate hunger of the machine. Secondly, the objects it makes being all alike, it desires that the consumers of these objects shall be all alike, as otherwise they might not choose to consume the standardized article. Thirdly, it demands uniformity from all of its so-called owners on penalty of loss of ownership. Were they to think and act differently from one another, incalculable elements would arise, and the life of the machine would be menaced.

21. It is in continual warfare with other machines which make a slightly different article. The result is competition, first of all between machines, then (by an appeal to human pride) between those operators most closely associated with them, and finally between their so-called owners.

22. One result of this is continual attrition. The machine disintegrates material, atomizes it, levels it.

When its speed is greatest, its restlessness greatest, and its competition with other machines greatest, it tends to be careless about the quality of the material it employs, and only demands uniformity in any given relative quality of that material. The same attrition and leveling is observable in human beings subject to the machine's influence.

23. As a corollary of this leveling-down process, veneer makes its appearance. Machine-made objects have veneer for two reasons. The first reason is to conceal defects and poor quality.

24. The second reason is that competition at this stage requires self-advertising, and it is easier to advertise a veneered product than an unveneered one. The machine imposes self-advertising on its so-called owners, and they create a new and vast mechanistic structure of advertising designed to push poor useless goods on the consumer indifferent to them.

25. The machine scorns intelligence beyond a certain point. The use of excessive intelligence would bring in the human factor, nay, even creativeness, which we have seen to be "error." If the consumer were more than moderately intelligent, he would refuse the machine's inferior product. Mass production and mass consumption hypnotize intelligence.

26. The machine lacks responsibility; at least, it entirely refuses to assume responsibility. This lack of responsibility tends, by extension or contagion, to

communicate itself to those closely associated with the machine. The individual operator tends to shift his responsibility to the next man, if possible, and if the nervous tension or the man's resentment is too great, human nature dictates to the operator a policy of "ca' canny" or revolt.

27. This is the death of craftsmanship, and begets scorn of creativeness and hatred of art.

28. The machine lays a strong emphasis on the value of time. "Time is money." By emphasis on time and on concentration of an extreme sort on the machine and the object being made, space is scorned.

29. Consciousness of space being a bad habit, the machine will not tolerate spaciousness in man. Spaciousness means leisure, free time. Leisure is idleness, and free time releases men from the machine.

30. Without free leisure and spaciousness, creativeness is impossible. The machine knows its enemies. They are the saint, the hero, and the artist. It offers mankind a new mysticism of material things. Those who accept this mysticism find that it is a mechanical substitute for religion ("just as good") and call it "Service." They never inquire what deity they are serving.

So much for the machine. Let us now look at the army.

CHAPTER THREE

I HAVE suggested several times that the machine impulse is contagious, and indeed I do not suppose it will be denied that men in America have a strong tendency to acquire the machine's habit of restlessness. Mankind is losing the habit of transmitting from man to man. Less and less do we find him transmitting ideas, achievements, or even the work of his own hands, in a personal way. He delegates this task of transmission nowadays to machinery. But it is surely *man's* job, if he is social, to transmit. There must be give and take between one man and another in a really social world.

How much give and take do we find in American life? Even in American conversation, there is very little real give and take. Conversation in America today is nearly reduced to comment on what the machine has given to us. Nearly all the topics of our conversation have been transmitted to us by the machine. In other words, the machine possesses the very substance of our minds. A mind possessed by the machine tends more and more to become a mechanized mind, that is to say, a mind whose responses

are largely limited to the natural responses of the machine itself.

In a world which is rapidly becoming industrialized, it is clear that men are rapidly becoming mechanized. Mind makes the man. A mechanized mind makes a mechanized man. For successful mechanization of men, I have suggested that it is necessary for them to conform to a uniform pattern. Hitherto the least unsuccessful attempt at imposing such conformity upon men has been the modern army.

Let us examine the characteristics of that great mechanistic structure known as a modern army in the same manner in which we have examined the characteristics of the machine, and see how closely the two series of characteristics parallel each other.

1. A modern army is as accurate as possible. It may not make mistakes.

2. It works under blind orders, the pattern of which it does not question. These orders have the quality of predestination for the rank and file. The philosophy of the rank and file, so far as it has any pragmatic value, is therefore determinism. There is, however, a further determinism in the philosophy of modern warfare. It is widely believed in both conservative and radical quarters that it was the idea of economic necessity which inevitably involved the world in a machine war. Personally I am not disposed to regard this idea of economic necessity as

more than one very strong factor determining the outbreak and continuance of the conflict. It cannot be denied, however, that the idea of the survival of the fittest, deeply rooted as it was in the modern mind in all countries, had a strong influence, not only in the determination of national policies, but also in the attitude of the average man in the street toward events as they pressed upon him.

The fatalism of Victorian ideology, based as it was upon Darwinian ideas among Conservatives and Marxian ideas among Radicals, had created a new dogmatic theology which it seemed foolish and even mad to oppose. It occurred to very few people that the structure of Darwin's and Marx's minds had been largely determined by the Industrial Revolution and by the supposed miracles wrought by the new god of the machine. The determined course of events, according to this theology, could never be profoundly modified by the free will of mankind. Life was held to proceed through conflict, competition, and warfare to some vague far-off divine event whose nature was dimly surmised to be more satisfactory than the contemporary state of affairs. It was man's duty to acquiesce and to further an historical process over which he had no direct control. He could only be sure that it would all come right in the end for his great-great-grandchildren. Just before the war, this philosophy was summed up in a popular song en-

titled: "We Don't Know Where We're Going, But We're on Our Way!"

When the war eventually broke out, it was clear that the industrial nations had to defend themselves against each other's machines, and the war itself speedily developed into machine warfare on a scale hitherto inconceivable to man. An industrial centre became at once a strategic point of the greatest importance. One side had to attack and the other side had to go to the defense of Belgium at once. It was an industrial nation.

3. A modern army must be maintained as cheaply as possible, always bearing in mind, however, the task for which it is designed.

4. Its ideal is to have no nervous factor. The rank and file are possessed by nervous factors, though at the same time supposed not to be nervous. However, a modern army tends to have less and less self-control as warfare goes on, and the rank and file have no self-control. This is abundantly clear when the troops come home, and when the armies' rulers make peace treaties.

5. It is impersonal, or at least designed to be as impersonal as possible. (The rank and file develop a herd personality, and it was observable during the last war that this herd personality was sometimes developed at the expense of the leaders. Witness Russia and Germany.)

6. Troops are designed to be absolutely interchangeable with their fellows, and their usefulness is measured by this interchangeability in large scale mechanical operations.

7. Large families are encouraged in a conscript population. There is often a tax on bachelors and a bonus or relative tax exemption for exceptionally large families.

8. In building up a modern army, the emphasis is entirely upon technique. The rank and file follow mechanistic rules only. Army eugenics are frequently based on a curious code. The rank and file are inoculated against typhoid, but official brothels are maintained on a large scale. Rum and ether are used for "speeding-up."

9. Error, which is defined as a human factor, must be eliminated. Error is severely punished.

10. Creativeness is dangerous. The object of a modern army is precision in destruction.

11. Men must be standardized in a modern army. They must adjust their minds and bodies to the restless rhythm of the army machine.

12. The rank and file of a modern army are trained to do useless things. It becomes necessary to make the things they do seem useful. They are done for the sake of "discipline" and "esprit de corps."

13. Speed and pressure are imperative. Warfare is a race.

14. There is an ambition to move quickly, check-mated for the most part by a similar ambition on the other side. Movement is at an impossible premium, and there is continual frustration.

15. This ambition and frustration beget restlessness.

16. Restlessness creates fatigue and finally breakdown. "Discipline" and "esprit de corps" in Russia rattled in a death-agony.

17. In order that the modern army shall not break down until the very last possible moment, it demands concentrated attention from men at every moment who must coddle it, feed it, give it medical attention, and see that it rests properly and as comfortably as possible, under the safest possible conditions when not engaged in its work of destruction. They must also see that it does not rest too long. It requires men who must make sure that it is able to work with the utmost speed, smoothness, and exactness. It demands concentrated attention from men at every moment. It revenges itself on men whose attention flags for even a second. It controls them absolutely, and in order to maintain their self-respect it encourages them to believe that they control its destiny.

18. It is hungry for power. Its power begets power. This rapidly acquired habit of power enslaves the men who are its atoms. (Machines know all about atomic structure.)

19. This hunger to use power, and to create more power for the mechanistic structure itself to use, encourages mass production. An army encourages this hunger and this mass production in the government which claims to control it. This mass production takes two forms, machine mass production of objects, and a demand for the mass production of human beings.

20. A modern army imposes conformity first of all as an ideal and then as a military command. Its own life depends upon conformity, and it relentlessly insists upon it. This conformity is imposed in at least three directions. Men forming part of the modern army must approximate as nearly as possible to its rhythm, and do the same things all the time at the same speed. This speed is dictated by the insatiate hunger of the national organism for power to win the victory. Secondly, in order to achieve this, a modern army desires that the rank and file shall be all alike, as otherwise their forced conformity might create internal conflicts which would weaken the cohesion of the army's mechanistic structure. Thirdly, modern armies demand uniformity in all governments on penalty of defeat. Were ministers to think and act differently from one another, incalculable elements would arise, and the life of the modern army would be menaced.

21. A modern army exists to be in warfare with another army representing a country with a some-

what different culture. The result is competition, first of all before war is declared; then, by an appeal to national pride, in destructive conflict between the two mechanistic structures which have absorbed the nation as food for their power.

22. One result of this is continual destructive attrition. The modern army disintegrates men and natural resources, atomizes them, levels them. When the activity of a modern army is greatest, its restlessness greatest, and its competition with another army greatest, it tends to be careless about the quality of the human beings and materials which it employs, and only demands uniformity in any given relative quality of those human beings and that material. At the most feverish point of its activity, restlessness, and competition, it does not even make this demand.

23. As a corollary to this, veneer makes its appearance. Modern armies are window-dressed for two reasons. The first reason is to conceal defects and poor quality so as to deceive the enemy.

24. The second reason is that conflict at this stage requires self-advertising in order to whip up human energy, and revive flagging courage and enthusiasm, and it is easier to advertise a veneered army than an unveneered one. A modern army imposes self-advertising on its government, and this government creates a new and vast mechanistic advertising structure designed to rouse false ideals in the minds of its subjects.

25. The modern army scorns intelligence beyond a certain point. The use of excessive intelligence would bring in the human factor, nay, even creativeness, which we have seen to be "error." If the rank and file on both sides were more than moderately intelligent, they would refuse to fight. Both the machine and the modern army hypnotize intelligence.

26. The modern army lacks responsibility in its destructiveness, or at least it entirely refuses to assume responsibility. It claims to be responsible only to itself. The individual human being tends to shift his responsibility to the next man if possible, and if the nervous tension or the man's resentment is too great, human nature dictates a policy of "ca' canny" or revolution. Such "ca' canny" or revolution usually, though not always, follows upon disillusionment some time after the war when the human atoms of the army have been absorbed or not absorbed by machine industry. It varies in degree according to national character and the length of time to which the nation has been subdued to machine industry.

27. The modern army mind scorns creativeness and hates art.

28. The modern army lays strong emphasis on the value of time. Time is victory. By emphasis on time and on concentration of an extreme sort on the immediate objective, the significance of which the rank

and file does not grasp in relation to the real scheme, space is well-nigh annihilated.

29. Leisure and free time are reduced to a minimum. They are dangerous for a modern army, because they release its electrons from the concentrated parent structure.

30. Without leisure and free time the creative faculty is destroyed or at least severely damaged. The modern army knows its enemies. They are the saint, the hero, and the artist. The real hero is a man of spiritual courage and not of physical courage. To replace its enemies the modern army offers mankind a new mysticism which is perfectly material. Those who accept this mysticism find that it is a mechanical substitute for religion, ("just as good") and call it "Patriotism." They never inquire what deity they are serving.

It will be noted at once that the parallelism between the machine and the modern army is tolerably close. It may also be recalled that since the war, in which armies tended to become more and more rigid and mechanized like machines themselves, experiments have been rapidly going forward in various countries to substitute so-called "mechanized armies," in which machines take the place of men as far as possible, for the old type of armies, in which machines were used in a far more elementary way, and

that these experiments appear to be regarded as satisfactory by those who are making them.

The inference seems to be that machines and mechanistic structures with as little human factor as possible are less inclined to revolt at being set destructive work to do than ordinary human beings are. In fact, they destroy with zest, and the curve of their impulse and success in a time series takes on the aspect of an algebraic sequence. The great war, I suggest, was machinery's attempt to enslave man in Europe. It only partially succeeded, as Europe had not the same wholehearted enthusiasm for machinery as America. The really dangerous large-scale attempt at present is directed toward America and Russia and, through the instrumentality of American finance and Russian proletarian self-consciousness, indirectly toward Europe.

CHAPTER FOUR

IF we find the American short story tending to become a mechanistic structure, we may perhaps begin to wonder whether its effects are likely to be creative or destructive. If we decide that its effects are on the whole likely to be destructive, we may take comfort from the realization that it will be difficult for completely mechanized fiction to win the same measure of acceptance from mankind as objects manufactured out of more material elements. The consumer will ultimately balk at accepting it. Fiction must mirror the soul of man, and mankind will never in my opinion make the complete biological leap necessary for it to become a machine. Men will always have sexual and religious passions to hinder them in this ambition. They will also have too much curiosity.

To come now to the qualities of the American short story as I have observed them during a somewhat careful study of sixteen years, let us see if these characteristics correspond in any noticeable degree with those of the machine and with those of the modern army.

i

The American short story must be as accurate as possible. It must be photographic and careful to include the most minute and irrelevant details. It must make no mistakes of omission or inexactness.

I. A. Richards, the British philosopher, remarked not long ago: "Thomas Gray was content to mention the 'lowing herd', and could leave the rest securely to his readers' imaginations. A modern American poet has to describe the beasts as though nothing resembling them had ever been seen before."¹ In other words, the poet and his readers, being of a mechanical turn of mind, want to know precisely how a cow is built.

Raymond S. Spears, a popular American story-writer, tells us how he goes about collecting ideas for his stories. "Generally speaking, I have a personal interest in some subject or other. I begin to collect information about it, as pearls, trapping, Mississippi River, shanty-boaters, etc. Perhaps a news clipping starts me off, or a book, or a fiction story. After a while, perhaps I have a hundred, a thousand clippings, books, etc. Then I go to the scene; thus I went to Muscatine, Iowa, on a motorcycle to spend half a day in a button factory, and a few days around that

¹ "The Changing American Mind." By I. A. Richards. *Harper's Magazine*. January, 1927.

button-making town, buttons and pearls going together!"²

You will readily perceive that Mr. Spears is unlikely to make mistakes of omission or inexactness whenever he writes a story inspired by a button factory.

ii

The American short story works to a predestined pattern largely determined by Poe, O. Henry, and magazines like *The Saturday Evening Post*. It is, therefore, Calvinistic in its activity and pleasing to the Puritan mentality whose passion is to predestine as well as to be predestined. Its predestination operates through the deadly ravages of a characteristic American mechanistic disease known as "plot," little valued and almost unknown in other countries. It is our proud boast that Chekhov wrote "sketches," but that *we* "write stories." In the American short story, predestined uniform types always do precisely what we expect them to do in precisely the same way. If they err, they err through ignorance or neglect of business standards. A Puritan cannot err otherwise, and he is flattered to be the god who condemns these erring mortals. More frequently, the Puritan business man is a hero and, by his cleverness against villainous odds, gets the cash and the girl. Being rather modern, as

² "Fiction Writers on Fiction Writing." Edited by A. S. Hoffman. Indianapolis, 1923. p. 36.

he thinks, he likes to discuss "problems," but the "problem story" to which he is addicted never raises any issue sufficiently vital to touch life at the quick.

J. Berg Esenwein, formerly editor of *Lippincott's Magazine*, and later a teacher of short storywriting, has thoughtfully described the difference between the "short story" and the "sketch." He dismisses the "sketch" as incomplete, but compares the "short story" to a watch. "Wheels turn in every direction, hidden springs exert their quiet force, and levers move hither and yon—all with the purpose of directing the hands as the maker designed them to move: inevitably toward the appointed hour. That is the short story."³

As the American short story no doubt claims to mirror with reasonable adequacy the movements of American men and women, it is to be presumed that American men and women move in these stories as their Maker designed them to move: inevitably toward the appointed hour.

Walter B. Pitkin, Associate Professor of Journalism at Columbia University, advises the ambitious American storywriter to study the market as a grocer studies his customers, and to find out "whether the people roundabout prefer pickles or pomegranates." Elsewhere he advises the writer to "study the fiction market as closely and as persistently as a Wall Street broker studies the stock market." He caps the climax

³ "Writing the Short-Story." By J. Berg Esenwein. New York, 1924. p. 33.

by saying: "What you should do is to get interested in the same subject matter and in the same problems of modern life which the successful writers are dealing with. And then form your own impressions and opinions about these and write what pleases you in the popular language of the day. One of the most pernicious pieces of advice ever given to young writers was that famous utterance of O. Henry: 'There is only one rule to success in literature. Write what pleases you.' " ⁴

Mr. Esenwein and Mr. Pitkin are two of the most popular and respected teachers of short storywriting in America. Begging the question whether short storywriting can be taught any more than poetry or musical composition can be taught, the utterances of these two men are sufficient to make clear how completely predestined the pattern of the average American short story is likely to be if their advice is followed. I can assure you that their opinion represents quite faithfully that of the average American editor and of the average commercially successful American short storywriter.

iii

The American short story is as cheap as possible. Its emotions are cheap, its characters are cheap, and the victories of its heroes are cheap. Most of all, its

⁴ "How to Write Short Stories." By Walter B. Pitkin. New York, 1923. pp. 6, 289, and 46.

saccharine sentimentality is cheap. The relative degree of its cheapness is carefully calculated and adjusted to appeal to different groups of readers who patronize different groups of magazines. The difference, however, between the five-cent weekly and the expensive monthly magazine is by no means so great as is commonly assumed. The expensive monthly magazine is sometimes merely more pretentious. It is an accepted matter of faith in America that the more expensive an article is, the better it is sure to be.

As to the cheapness of the American short story, Fred Lewis Pattee quotes some illuminating sentences from the late Frank Norris's "Salt and Sincerity" papers in *The Critic* for 1902. "'A literature that cannot be vulgarized is no literature at all and will perish.' The short story under the new conditions was to be, he believed, like the fifteen-cent magazine and the daily newspaper, a thing brilliantly done, timely to the moment, and completely ephemeral. The life of a short story, no matter what its quality, was a month. 'If very good, it will create a demand for another short story by the same author, but that one particular contribution, the original one, is irretrievably and hopelessly dead.' It was impossible to galvanize it into life by issuing it with others in book form." ⁵

⁵ "The Development of the American Short Story." By Fred Lewis Pattee. New York, 1923. p. 338.

Professor Pitkin states that a good short story must have "complications." "The villain's foul conspiracy to abduct Maude, the Beautiful Cloak Model; . . . the unexpected arrival of the bank president upon the scene, just as the yeggmen are about to blow open the bank vaults; all such are complications. And without them, there can be no emotions developed within the story and hence none awakened in the reader." ⁶

I do not know whether Professor Pitkin's opinions about "complications" reflect the official opinion of Columbia University, but if they do, these opinions seem to run singularly counter to those of Balzac and Hardy, and suggest that the American short story is in a bad way and sinking fast. Both Balzac and Hardy furthermore disagree with Professor Pitkin when he advises the American writer to present "visions of fulfilled desire" in his stories.⁷ These visions suggest that the American short story has nearly crossed over Jordan.

iv

In the American short story, the heroes have no nervous factor, or are at least designed to have none. (As a matter of fact, it is sufficient if they hide it behind a mask and appear to be "strong, silent men." They never behave like Don Quixote, and they would

⁶ *op. cit.*, p. 32.

⁷ p. 265.

be ashamed of Sancho Panza's loyalty.) The functions of the nervous factor are transferred from the hero to the villain or to the erring woman, but the latter are sternly punished for their neuroses of which the hero is frequently the cause.

Professor Pitkin lays great stress upon the necessity of creating a situation in every short story which will cause a conflict of desires. Such a situation, as he explains it, appears to be inevitably melodramatic, and the inference which I draw from his exposition of this type of situation is that the American short story in his opinion should be as melodramatic as possible, that is to say, as tensely nervous as possible. As a matter of fact, melodramatic American stories, when they are at all pretentious, are full of tall talk and neurotic situations.

v

The American short story is impersonal. It seldom creates character, because its readers are afraid of individuality and dislike it. Like the machine, the American short story manufactures "types," and it is the recognition of these "types" which appears to give pleasure to the reader. He tends to sacrifice his own personality in order to approximate more closely to an ideal "type," and his "best girl" encourages this tendency in him. To win her hand he must at least pretend to be a motion-picture hero. As Mr. Esen-

wein thoughtfully remarks, "What the reader wants, for the most part, is a Representative Man, with due emphasis laid on each word." ⁸

vi

The American short story is designed to be absolutely interchangeable with its fellows. Its characters, being "types," are usually thus interchangeable, and the usefulness of a story in a magazine of large circulation is measured by this interchangeability. Magazines with circulations of over a million copies tend more and more to become large scale mechanistic structures fed by advertising. This tendency is also clearly perceptible in the old-fashioned "middle-brow" family periodical, though not to the same degree.

Fred Lewis Pattee quotes Jack London's advice at the beginning of his popular career. "Put a snapper at the end, so if they are crowded for space they can cut off your contents anywhere, reattach the snapper, and the story will still retain form." ⁹ It is apparent from this advice that the American magazine editor regards the body of the short story as similar to that of some elementary kind of earthworm. O. Henry took Jack London's advice faithfully, and his example has been followed ever since by most American short storywriters.

⁸ *op. cit.* p. 228.

⁹ *op. cit.* p. 340.

The cutting of stories by editors in such a way that the passages omitted are presumably not missed by the reader implies that the American short story is assembled from interchangeable parts. It furthermore implies that "the plot's the thing," and that everything else can be cut if necessary. Now the plot of a story is the most mechanical element in it. It is the mechanical element, therefore, which cannot be dispensed with. The imperious demands of advertising matter can crowd out at a pinch all such "superfluous elements" in a story as its characterization, dialogue, and atmosphere. These form the soul of the story, but the soul is not really necessary. It is only the body that matters, and the body of the American short story is almost always mechanical and synthetic.

vii

If the American short storywriter achieves a satisfactory mechanical product which the magazine of large circulation finds acceptable to its advertisers, he is not allowed to practise literary birth control. He reproduces his original story as frequently as possible until another writer, copying his manner and formulæ, and adding one or two new nuts and bolts of his own design, consigns the poor devil and his wares to the scrap heap.

Similarly, the American reader will usually honor with his suffrage the writer who contrives a new and

satisfactory pattern, good, bad, or indifferent, and encourages him with the editor's connivance to reproduce it with as little variation as possible at frequent intervals. The most popular writers of short stories in the most popular American periodicals have a definitely recognized pattern from which they do not widely depart. It is known as their "style." Representative writers of this sort are H. C. Witwer, Octavus Roy Cohen, Lucian Cary, "Holworthy Hall," Konrad Bercovici, Achmed Abdullah, Clarence Budington Kelland, Fannie Heaslip Lea, Peter B. Kyne, Rupert Hughes, Fannie Kilbourne, and Arthur Somers Roche. This short list could be extended endlessly, and it would include the names of many other talented writers who honestly believe that they are doing their best and frequently are doing so.

viii

When the writer manufactures a new short story, his concern is almost entirely with the technique of manufacture. He is told by the editors and college professors how to make this new story, and they insist that he shall follow mechanistic rules only. He goes to college in order to find out what the public (*i.e.*, the editor) wants and how it wants it. What he learns in college will be apparent from what the various writers of textbooks on short storywriting, from whom I shall quote, have to say.

Let us listen to the criticisms of N. Bryllion Fagin who dissents from the usual point of view of these textbook writers. "Our texts abound in geometric diagrams of lines and curves and circles, bisected and intersected, zigzagging, up and down, rising to various points of crises and climaxes and catastrophes, and falling again to the inevitable *dénouement*. These diagrams look like sacred hieroglyphics to the credulous student who approaches their cryptic meaning with a reverent awe. . . . The incompetent who cannot think in terms of criss-cross lines is eliminated."¹⁰

You will see from Mr. Fagin's statement that plot construction is a new form of mechanical engineering, and that American universities appear to be certain that it can be successfully taught. It has been left for America to discover that literature is merely a simple form of mechanical engineering which can be practised with success and profit by anybody.

ix

Any deviation from the accepted pattern of the American short story is error, and the storywriter rash enough to deviate cannot easily find a publisher for his writings.

It is the customary practice of one of the most popular American periodicals to watch carefully for

¹⁰ "Short Story-Writing: An Art or a Trade?" By N. Bryllion Fagin. New York, 1923. pp. 20, 22.

the appearance of new writers in other publications. When it finds a new talent which it regards as promising, it sends a sub-editor to visit the new author at his home. The sub-editor tactfully hints that he has faith in the writer's talent, and that he believes the writer might profitably associate himself with the magazine from which he has come as an ambassador.

He goes on to say that the stories by this new writer which he has seen are not precisely adapted in their present form to the requirements of his readers, and then proceeds to make many fundamental suggestions as to the form and pattern of story which, he considers, would be acceptable. He reinforces his suggestions by pointing out that contributions to his magazine are much better paid for than contributions to most other magazines, and that if the author can produce a "suitable product," the magazine which he represents is likely to be loyal to him and purchase his wares frequently. In other words, the magazine corrupts the budding author by promises of "big money."

If the author shows signs of some literary integrity during the course of the interview, the sub-editor does not press his point crassly, but contents himself with more subtle suggestion by correspondence over a long period of time after having repeatedly invited the author to submit more short stories to his magazine. Needless to say, the magazine proceeds to exert in-

direct pressure on the author by rejecting his stories one after another, while continually urging him to submit more manuscripts.

Sooner or later, the author tends to approximate more and more closely in his work to the magazine's preferred pattern until ultimately he writes a story which is accepted by that magazine. The story is so well paid for that the author is tempted to try again, particularly as he knows that there is an increasing scale of payments for manuscripts in this particular office after a certain number of stories by a particular author have been accepted. Moreover, publication in this magazine confers prestige, and opens the editorial door of most other magazines to him. He finds that his work is the object of much editorial competition.

X

American magazines of large circulation have no use for creativeness. They go on with their set program and are perfectly certain that creativeness is a regrettable function. Of course, the name of a great creative artist sometimes has considerable advertising value, and if he refuses to conform to editorial suggestion, his work may still be accepted, although the editor feels regretful pity for his wrong-headed eccentricity.

The general editorial attitude in American maga-

zine offices has been admirably described by Mr. Fagin in the book from which I have already quoted. There is an undefined, but no less real, censorship in most magazine offices, which determines to a very large extent the ideas and situations which a short story may present. This censorship is based on a curious list of taboos which have no necessary relation to decency or morality. It goes without saying, of course, that the American magazine professes to be highly moral, but in many cases salacious writing is encouraged as a matter of policy, provided that it does not cross a line which is by no means accurately determined.

The real censorship of ideas and situations has little to do with any moral question. The tone of a short story must be optimistic; flirting with sex is desirable, provided that sex is not regarded as real; the story must contain no religious speculations or philosophic ideas which challenge, or even test, currently accepted opinions on any subject; it must present no social or political problems; it must consistently preach what is known as "Americanism;" it must have a happy ending. In other words, the writer must agree with as many average people as possible. Therefore he is forbidden to present any new ideas. Apparently it is believed that in the mind of the American reader unfamiliarity breeds contempt.

The effect of this accepted editorial code is unfor-

tunately obvious. Writers who rebel against it,—and all American writers who are worth their salt do rebel against it,—react in a manner which is equally determined. They tend to become fatalistic pessimists; their pictures of love and marriage tend to become photographic renderings of frustrated rut; their philosophy never examines current American ideals in order to see how far these may be valuable; they indulge in social and political propaganda to an extreme degree, thus selling their birthright for a pot of message; they deny the value of most current ideas which have any traditional validity; they sneer at their country; and their stories usually end unhappily in a defiant way, as if they believed that art always requires an unhappy ending.

xi

The ideal put forward for the writer by the American editor is standardization. The writer must always write the same story. By extension, or by contagion if you like, the magazine of large circulation and the advertisers behind it impose this ideal of standardization upon the reading public.

Mr. Fagin, speaking as a disillusioned teacher of short storywriting, makes the following confession. "The sum and substance of all we preach may be summarized in the one commandment we zealously enforce above all others: 'Thou shalt not write any-

thing an editor won't buy.' Then we analyze what editors do buy, arriving, by the process of induction, at rules and regulations, which we promptly proceed to incorporate into textbooks for the unlettered. . . . An editor of a prominent periodical once outlined the qualifications that recommended a literary offering to him. He had set up before him an ideal reader, an imaginary lady with a family of daughters up in Vermont, and any manuscript submitted to him had to answer satisfactorily this mighty query: 'Would the old lady want her daughters to read this?' If this editor happened to write a textbook for the instruction of the would-be storywriter, the old-lady-and-daughters question would undoubtedly figure quite prominently therein. I am not aware of any textbook on the subject by this gentleman, but other writers have had this question, or similar ones, in mind in evolving laws for the would-be successful."¹¹

Waldo Frank has related how he wrote to Jack London shortly before his death, asking him to contribute to a new magazine with honest standards which he was editing, and stating that friends had informed him that London had better stories in his desk than any which he had published elsewhere and that the popular magazines had refused to publish them. Jack London replied that such stories did not exist, and added: "I do not mind telling you that, had

¹¹ *op. cit.* pp. 9-10.

the United States been as kindly toward the short storywriter as France has always been kindly, from the beginning of my writing career I would have written many a score of short stories quite different from the ones I have written.”¹²

xii

The writer is encouraged to write silly stories in a silly verbose manner. It therefore becomes necessary for the magazine of large circulation to make the silly stories it publishes seem important.

I offer as an example of a silly story one published recently in a weekly periodical. It is unnecessary to summarize the plot of this story, and one or two illustrations drawn from it will be sufficient for my purpose.

A college boy in the lobby of a hotel sees a girl who appeals to him as charming. He goes up to her, pretends that they have already met at a promenade dance, and is rewarded by being told her name and asked to look her up in the telephone directory. The stimulus of this reward is immediate. “New and thrilling harmonies sang within Arnold Taite. Suddenly it had become a world of glamorous excitement, of romantic, clandestine meetings. . . . At last he would be admitted to those enchanting scenes he had known only through meager daydreams; at last he

¹² “Our America.” By Waldo Frank. New York, 1919. p. 26, footnote.

would intimately meet with soft laughter, smooth white cheeks and red enticing lips; trim ankles, even shapely calves, that gleamed softly through glossy silk. He would encounter slender waists that yielded to a masterful arm; mysterious veiled glances that ardently lured him on to enrapturing uncertainties, to breathless adventures in company with those most fascinating and mysterious creatures—girls.”

On the first page of this story, there is a drawing of a girl giving a college boy scalp treatment and stroking him under the chin. On the second page there is a drawing of a girl and a boy sitting together on a sofa looking over a photograph album. The legend underneath this drawing reads as follows: “Now here’s one of me in a bathing-suit. Somehow it seems I just get bewitchinger and bewitchinger.”¹³

This story is by no means unusual of its kind. Three-fourths of the stories published in American magazines are quite as banal and silly. It is assumed, however, that this sort of story is what the public wants, and our most respected universities are busily engaged teaching thousands of men and women to turn it out in mass production. We begin to wonder whether American reading really broadens the mind.

¹³ “Beauty Irresistible.” By Day Edgar. *The Saturday Evening Post*. December 1, 1928.

xiii

The magazine of large circulation being designed to make money for men, its passion is to make as much money as possible as quickly as possible. Its exultation is therefore in speed. Its gospel is that of getting rich quickly. It imposes speed values upon the writers who contribute to its pages, corrupting them with money in order to gain its end. By extension or contagion, it imposes the same speed values upon the reading public.

The popularity of "Get-Rich-Quick Wallingford" is still fresh in the public mind. Mr. Fagin alludes to the struggles of O. Henry in his endeavors to fulfil his three-year contract to supply the *New York World* with a story every week. "There were weeks when O. Henry would haunt the hotels and cafés of New York in a frantic search of material, and there were times when the stories could not be produced on time and O. Henry would sit down and write the most ingenious excuses. Needless to say that O. Henry's stories bear all the marks of this haste and anxiety. Nearly all of them are sketchy, reportorial, superficial, his gift of felicitous expression 'camouflaging' the poverty of theme and character. The best of them lack depth and roundness, often disclosing a glint of a sharp idea unworked, untransmuted by thought and emotion." ¹⁴

¹⁴ *op. cit.*, p. 35.

The author's haste and anxiety infects the reader. The magazine appears to wish the reader to become as mechanical as possible. For many months an American magazine of large circulation printed at the beginning of each story and article which it published the reading time in minutes and seconds which it considered that the reader was justified in taking. American fiction can only be valued as a mechanical process for killing time when the reader is supposed to punch a time-clock before beginning and after finishing a story. So far as I know, it has not yet occurred to an American editor to prescribe the number of minutes in which an author must write a story for him.

xiv

The magazine's craving for speed puts movement and patter at a premium. Stories must be "snappy." In fact, there is a popular magazine known as *Snappy Stories*.

A typical example of movement and patter occurs in a recent story published in another American weekly. Characteristically enough, the story is entitled "Keep Your Eye on the Ball." I quote a short passage from this story which illustrates reasonably well what I mean:

"'You know,' he said, 'I think your family tree's extraordinarily interesting and all that, but that's not the

point just now, is it? Madden, eh? Mrs. Madden. What's she wearing? How do I know her when I see her?'

" 'Bl-black and—white—voile,' Sally gasped. 'A large white hat.'

" 'Good! Tall—short—thin—fat?'

" 'In between—' said Sally. 'Quite—quite nice looking—her hair's white—'

" 'Good!' said the young man. 'You see—if you just concentrate you're all right—' and off he rushed. Sally arose and followed him. She didn't want to go home, any more. Not until she found out what this young man wanted.

"In a minute she found out. Her aunt was introducing him to Marjorie Romer, and the young man who'd been with Marjorie, looking incredulous but happy, was fading away, swiftly, in the direction of a *débutante* who had five men already but was perfectly capable of handling another." ¹⁵

This passage is neither better nor worse than a cross-section of the average American short story. I found it by picking up the first magazine which came to hand in a group that was awaiting my attention.

XV

Continuous movement and patter beget restlessness, first of all in the writer, and secondly in the reading public.

¹⁵ "Keep Your Eye on the Ball." By William Almon Wolff. *Collier's Weekly*. November 24, 1928.

The writer's restlessness takes many forms. The mood of romantic escape is perhaps the most common form observable at the moment. Most American short storywriters, whom I know personally, long to travel. They all hope to get down to the South Seas some day. Quite a number have already gone there. Unfortunately they found nothing to do when they got there and speedily came home. Coral islands do not suit restless people for any length of time.

Other writers convince themselves that it is necessary for them to travel in order to find exotic settings for the jaded stories which they write for a jaded public. If they are sufficiently popular, they extract letters of credit from editors as an advance against payment for future stories, on the theory that they need to gather what they call (picturesquely enough) "local color."

Another large group of writers who are less fortunate try to relieve their nervous tension by writing melodramatic stories which are emotionally false, in the belief that these stories are tragedies and that tragedy is undoubtedly the highest form of literary art. In order to conciliate the editor, they always tack on a happy ending. Melodrama with a happy ending is always popular and therefore always profitable. With luck a melodrama with a happy ending can also be sold to a motion-picture company, pro-

vided that there is enough false emotion and nervous tension in the story.

Some very fine writers fall into this trap sooner or later. I recall a man much honored nowadays by prize committees who showed every promise ten years ago of becoming the foremost short storywriter in America. He still writes extremely interesting stories, but the restlessness of American life has caught him, and during the last few years his stories have been getting more and more taut and shrill, and his earlier sensitiveness to character has become strangely blurred. His stories are now pitched in much too high a key, he has lost much of his economy of statement and ability to render a picture with a few deft touches, and he appears to be lashing an unwilling horse most of the time. Yet he has more conscious integrity of intention than any other American writer I know and, if he ever succeeds in regaining his earlier quiet certainty, he may yet prove to be an important figure in American literature.

The restlessness of the American reader is observable everywhere. Very few readers can sit still and read a book from cover to cover. This fact appears to be realized by editors. I find the following caption at the head of a serial in a recent issue of an American magazine: "Do not start this serial unless you are prepared to become so absorbed that you will be

utterly restless until you finish it.”¹⁶ I fear that American life had made most readers of this caption utterly restless before they began to read the serial.

xvi

Restlessness rapidly wears out the writer's mind. It rusts the mind of the reading public and finally dulls and wears out its creative response.

In my discussion of machinery, I have already pointed out how all the senses tend to be deadened by American industrial life. I have shown how the eye and ear have lost most of their ability to respond to sensations; how dull our senses of taste, smell, and touch have become; and how even sex has degenerated largely into jaded boredom. It stands to reason that the American artist has suffered from the deadening of the senses as much as any other man. Not only are his senses deadened, but his mind is dulled. When I talk with an American short storywriter, I usually find that his conversation is limited to gossip about markets, agents, editors, and the relative success or failure of other storywriters. One of the best American writers, when he visited me in Oxford some years ago, sat outside my door for hours audibly counting the Ford cars as they passed.

The reader's mind is also dulled and its creative response shows signs of wearing out. The great Ameri-

¹⁶ *The New McClure's*. December, 1928.

can public has the most deadly fear of leisure. If you have leisure, it is more than likely that you will have to think. In the Christmas issue of a magazine which claims a paid circulation of 2,200,000 copies, an article appears which presumably answers to a necessity of its public. This article is entitled: "Ten Games that Will Give Life to Your Party."¹⁷ You did not have to galvanize a Christmas party in the days of Dickens.

xvii

In order that the creative response of the reading public shall not wear out until the very last possible moment, the magazine of large circulation harnesses men to its needs, whether these needs are of an editorial, advertising, financial, or other nature. These men must coddle it, feed it, and give it medical attention. It demands concentrated attention from men at every moment who must make sure that it is able to work with the utmost speed, smoothness, and exactness. They must also see that it "circulates," that it keeps moving. The magazine controls the men who are associated with it and, in order to maintain their self-respect, it encourages them to believe that *they* control *it*.

The editor of one of the largest women's magazines in the United States told me two or three years ago how the business department of that mechanistic

¹⁷ *The American Magazine*. December, 1928.

structure which his magazine tends to become called in an efficiency expert to give advice to the editorial department. It was naïvely believed that an efficiency expert, by virtue of his position, would no doubt be able to give valuable advice which would improve the literary judgment of the editor and his assistants. This particular editor, having a mind of his own, was probably not much influenced by the efficiency expert's advice. I quote this happening, however, as an admirable illustration of the way in which a mechanistic structure endeavors to impose its machine mind upon American writing.

In very few cases nowadays has the editor of a magazine with a large circulation any mind or will of his own. I am acquainted with many American editors, and very few of them are intellectually adults. Most of them are fussy children playing with complicated machinery. They are paid large salaries and not allowed to do much harm as a machine reckons harm. The mechanistic structure of the magazines dictates their policy, although this mechanistic structure is always nursed as if it were in a bad way. Fever charts of its circulation are kept as well as fever charts of the public's response to the stories and articles of each contributor to the magazine. If the magazine has a million readers, all but ten of them are likely to read a story without feeling impelled to write to the editor favorably or unfavorably about it. The

other ten are cranks who threaten to cancel their subscriptions. This is regarded as normal. If twenty people cancelled their subscriptions, however, after reading the same story, the fever chart of that story would record a high temperature, and words would be likely to pass between the editor and the author. If the unfortunate incident occurred twice, that author's contributions to the magazine would be likely to cease.

Little by little in the editorial and business offices of a magazine a large accretion of traditions and prejudices based on these fever charts is collected. These traditions and prejudices are like a fine network of silken cord strangling the editor's initiative and freedom of choice. Most of them are irrational, but they are none the less potent. They reduce the editor's choice to a least common denominator of mediocrity. The editor new to his job reacts freshly and sincerely enough at first, but he is soon subdued to the material he works in. I have seen this happen over and over again. I do not blame the editor. I blame the mechanistic structure of his magazine, which has an elementary brain incapable of creative imagination and therefore hostile to it.

xviii

The American magazine is hungry for power,—financial power, political power, even judicial power. It needs endless power. Hunger begets greed and

power begets power. The magazine hunger for power enslaves men. First of all it enslaves the men who are most closely associated with it,—its writers, its editors, its advertising men, its machine-tenders, its owners.

I could make a well-nigh endless list of the forms which this hunger for power assumes. Let two or three examples suffice. During the past few years many large magazines have started campaigns among their readers designed to standardize American life in one way or another. Sometimes they have been justified, but more frequently they have yielded to the Puritan's passion for predestining his countrymen. Apart from these organized campaigns, the tendency of nearly all the women's magazines and of many magazines addressed to men is to standardize food, dress, and manners. This is done by exerting every effort to make the standardized food and dress produced by its advertisers seem indispensable to its readers. It is difficult to tell where advertising stops and articles and stories begin. The end of most articles and stories wanders drearily through the advertising pages seeking a home in the kitchen or in the back seat of an automobile.

Furthermore most magazines of large circulation induce the reader by reiterated suggestion to support big business in its more predatory dealings with the domestic and foreign public. They support big busi-

ness in its greed after foreign markets and tend to influence public opinion strongly to promote the interests of big business in foreign politics. This is perfectly clear to the man in the street in Great Britain and Germany as well as in South America.

xix

The hunger of the American magazine to use power, and to create more power for itself to use, encourages mass production. It encourages this hunger and this mass production in the men who claim to be its owners. This mass production takes two forms. The magazine demands mass production of stories, and it engages in mass production of public opinion and standards. It values the mass production of public opinion and standards for two purposes of its own: first, in order to create a mass mentality responsive in a friendly way to its program of power; secondly, in order to make sure of a supply of human beings in largely increasing numbers to purchase its own standardized product and the standardized products of its advertisers, who in the long run support, keep, and own its owners.

The mass production of stories is visible to the naked eye. Any monthly magazine which publishes fifty or sixty stories a year receives twenty or twenty-five thousand manuscripts during the same period. Needless to say, very few of these manuscripts ever

attain the dignity of print. They are usually written by misguided men and women who have been led to believe by universities and correspondence schools that anybody can learn to write and sell marketable short stories. All the colleges are working overtime turning out incompetent short storywriters. As most American universities are rapidly evolving into mechanistic structures, the charlatanism of their professions in this respect usually passes unnoticed. Correspondence schools of short storywriting rouse a little suspicion in the public mind, but not very much.

Most publishers find it profitable to have one or more shady textbooks of short storywriting on their lists, and these books appear to have a large sale from year to year. Publishers value them as permanent property.

Some years ago an instructor in one of the largest American universities went to Oxford in order to take a postgraduate degree in English. The late Sir Walter Raleigh was appointed as his adviser, and Raleigh asked him the subject of the principal course which he had taught in the United States. I am credibly informed by a friend of Sir Walter Raleigh that the student replied: "I lectured on the advanced psychology of the business letter."

It is not difficult to illustrate the manner in which the American magazine engages in the mass production of public opinion and standards. Even a careless

study of a popular magazine will show you how closely the stories, articles, and illustrations fit into the advertising pages. Many popular storywriters also write advertising copy. Even when they do not, their stories tend to be written in the high-flown manner which is characteristic of American advertising copy. Magazine illustrators carefully copy the styles of clothing illustrated in the advertising pages. Storywriters employ the automobile as an omnipresent character in most of their stories and describe at considerable length the widely advertised foods which are eaten at American breakfast and dinner tables. Their heroes display the same ambitions as are glorified in the advertisements of correspondence schools and mind-training courses. Many magazines designed to appeal to men publish articles preaching the gospel of "self-help" in a manner which sends the reader to their advertisers, who are prepared to practise "self-help" at the "self-helping" reader's expense. Every endeavor is made to conceal the fact that "self-help" is a euphemism for "grab."

XX

The American magazine imposes conformity upon the public, first of all as an ideal, and then as a social necessity. Its own life depends upon conformity and it relentlessly insists upon it. This conformity is imposed in at least three directions. Writers and editors

must approximate as nearly as possible to its rhythm, and do the same things all the time at the same speed. This speed is dictated by the insatiate hunger of the magazine. Secondly, the stories it publishes being all alike, and the goods it advertises being all alike, the magazine desires that the consumers of these stories and of these goods shall be all alike, as otherwise they might not choose to consume the standardized article. Thirdly, it demands uniformity from all its so-called owners on penalty of loss of ownership. It makes this demand through its advertisers, who advertise in its competitors as well.

This tendency of the American magazine to impose conformity on everybody is a direct result of the mass production stimulated by the magazine's hunger to use power. The conformity among writers and editors is not difficult to perceive. In fact, it is far more difficult to differentiate at sight the work of one writer of the same "type" of story from that of another writer with the same relative amount of skill.

On the editor's page in a recent issue of a large woman's magazine extracts are printed from two forthcoming serials. After reprinting these extracts, the editor proceeds to say: "Now one of these novels was written by———, and the other by———." (We have arranged the names alphabetically.) Can you guess which wrote which?"¹⁸ I am thoroughly

¹⁸ *The Woman's Home Companion*. December, 1928.

familiar with the work of both writers, who are best-sellers, but I was unable to answer the editor's question. After studying the American short story carefully for sixteen years, I must confess that in nine cases out of ten I am still unable to recognize the author of a story from his style. It is his formula which usually reveals his identity.

All this goes to show that the mind of the American short storywriter has become so like that of his neighbor that it tends more and more to become a machine interchangeable with that of his neighbor. American short stories become more and more like grains of sand on the seashore which all resemble one another. Yet even a grain of sand has three dimensions, while the American short story usually has two dimensions only. Its characters, its incidents, and its plot are cut out of paper. The American short story, for the most part, has surface but no depth.

An American editor has unconsciously diagnosed the disease from which the American short storywriter, like the rest of his countrymen, is suffering. "In the New World everybody will live in communities, tied closely to each other and to all the rest of the world. It will be a world run by machinery. Man's function will be to run the machinery, *to build his brains into it*.¹⁹ . . . One genius builds his brain into a machine. . . . One unskilled operative of low in-

¹⁹ Italics mine.

telligence runs the machine; he does not have to think *because the machine does the thinking*.²⁰ This man does not need muscles. He has unlimited electric horsepower to do the muscular work of turning over the wheels of his machine."²¹

Let us apply this editor's remark to the American magazine, the American editor, and the American author. The American magazine is a little world run by machinery. The editor's function is to run the machine: the author's function is to build his brains into it. The editor may be and frequently is a highly paid unskilled operative of low intelligence. He does not have to think because the mechanistic structure of the magazine does the thinking for him.

xxi

The magazine of large circulation is in continual warfare with other magazines of large circulation. The result is competition, first of all for circulation, secondly for advertisers, and thirdly for authors.

This competition naturally takes many forms. Before the war raised the cost of living and of doing business, the most bloodthirsty form of competition was price-cutting. Another favorite form of competition, which is designed to impress readers and advertisers and to attract new authors, is the prize

²⁰ Italics mine.

²¹ "Day to Day Miracles." *The New McClure's*. December, 1928. p. 17.

contest for the best short story or the best novel submitted to a magazine. This is infinitely less expensive than price-cutting, but considerably less effective.

A third form of competition is designed to attract advertisers in the same way that advertisers attract the public. An interesting advertisement recently appeared in a national weekly which has already succeeded in obtaining a large paid circulation in a short time. This advertisement, after explaining how rapidly the circulation of the magazine had grown, went on as follows: "We know of no comparable record in the magazine business. Or in any business in a perishable product *where spoiled and unsold goods may be returned.*"²² Did the copy-writer smile as he penned these sentences?

xxii

One result of this competition is continual attrition. Creativeness disintegrates, characters are atomized, the story and its readers are leveled down. Being speedy, restless, and competitive, the magazine is quite careless about the quality of the material it employs, although it demands uniformity in any given relative quality of that material. I use the word "material" advisedly, as in this market stories are regarded

²² Italics mine. See *Liberty*, November 24, 1928. p. 8.

by the writer, editor, and advertiser as a commodity like soap.

John Cournos has recently quoted the advice of a literary agent in New York to a novelist of established international reputation: "I could have placed your short stories in the magazines but for the fact that you write too finely. If you could only get down to the language of the common people I could do very well for you."²³

I am thinking at the moment of a certain magazine whose circulation had climbed to the point where it ranked among the most widely read periodicals in America. It made no false pretensions about its merit, but its editor was a man of definite personality who usually knew a good story when he saw it and who believed that the average reader preferred a good story to a bad one. His faith was obviously justified by the response of his readers, as the magazine's circulation chart clearly showed. Unfortunately the revenue of a magazine is not determined by its circulation, but by the amount of advertising it succeeds in obtaining and keeping. Advertisers showed less enthusiasm for this magazine than the public showed. Circulation without advertising is a liability and not an asset. Advertisers were frankly disappointed in the magazine. They had no faith in its stories. For years the

²³ "Will Culture Survive?" By John Cournos. *The Yale Review*, January, 1928.

editor put up a fight for quality, but in the end he was beaten. The quality of this magazine's fiction has since sadly degenerated.

xxiii

As a result of this leveling-down process, which is so apparent in every magazine of large circulation, veneer makes its appearance. Veneer conceals defects and poor quality, as I have said before. This veneer usually takes two forms: first of all, emphasis on the sterilized anæmic thing called "culture;" secondly, a deft, slick patter.

Many a promising literary artist has succumbed to the temptation of veneer. I recall the case of a novelist, biographer, and storywriter of distinction whose early work was very fine indeed, but whose ambition to make money proved his final undoing. I admired his first short stories very much indeed, and ten years ago we exchanged several letters. He had a passion for Stendhal and Flaubert, and used to write me very interesting letters full of profound literary criticism. His passion was genuine, and his work measured up to the best European standards. Now he writes frothy stories full of clever patter. His enamel is good, but his stories are bad. He still talks about Stendhal and Flaubert.

I recall another promising American writer who had a passion for Turgenev. At one time he wrote me

perhaps twenty letters about Turgenev. I frankly confess that I was impressed by his apparent sincerity. He has now given up writing short stories and is a "publicity expert." I have come to be suspicious on principle of storywriters who talk too much about their art. After a few years, their stories become rather like D.A.R. culture and apples from Oregon. Apples from Oregon are huge and have a wonderful polish, but apples of humbler size and appearance often have a better flavor. The most highly flavored American short stories appear to be coal tar products.

xxiv

Competition between magazines requires self-advertising, and it is easier to advertise a veneered short story than to advertise an unveneered one. Apart from self-advertising, the industrialized magazine of large circulation is built on the gospel of advertising, and has become one of the four new advertising mechanisms designed to push poor useless goods on the consumer indifferent to them. Its serious rivals are the newspaper, the radio, and the motion-picture, which tend to swallow up the personality of the short storywriter even more successfully than the magazine of large circulation. It is commonly believed that newspaper reporting is a necessary apprenticeship for imaginative literary work. I understand that this belief originated in Harvard University courses in

English. How handicapped Shakespeare and Tolstoy and Hardy must have been!

Even in the schools the belief that there is a connection between advertising, salesmanship, and literary work is inculcated in the minds of the young. John Cournos has related an experience of his own. "The other day, my eleven-year-old son brought home a beautiful composition-book from the Junior High School, in which one of the printed topics for a composition rather appalled me. The title was: 'How to persuade a woman to buy a vacuum-cleaner when she says she cannot afford to buy one.' " ²⁴

A casual examination of the advertising pages in any issue of a national magazine will make it clear that much the same kind of persuasiveness is demanded of writers of advertising copy. The style of these writers is not unlike the style of the most popular American storywriters.

I have culled a short anthology from a single issue of such a magazine. "How about a big, juicy Peach Shortcake to-night? . . . Substantial soup makes such a wonderful luncheon. And the best of it is that — is already cooked for you. . . . Start to-day and let —'s famous French chefs lighten your household tasks. . . . The Quaker Girl says: 'Give beauty. . . . Give work-saving for Christmas.' . . . What better gift to the wife who does her own housework

²⁴ "Will Culture Survive?"

than a —— Rug! . . . The new —— offerings will set new standards by which all other cars must be measured. . . . Your list of customers . . . is only this one woman multiplied! . . . Consider your customers as *one person*—and make your mailings *good enough* to attract and sell that one person. Expressive —— Papers will help you. . . . Fittings by —— is the modern hall-mark of superior automobile body equipment. . . . The joy of living. . . . It is good to live and give. The pleasure of giving and receiving a —— Watch will not be momentary, but will last and grow with increasing pride in its sheer beauty and faithful service as a precious timepiece. . . . Make this a —— Christmas—a day he'll remember every day he shaves. . . . Recently while making screen tests to find the most effective combination in dress, movie stars and directors discovered that shapeliness of ankle and leg could be enhanced to a marked degree by an utterly new type of hosiery. . . . You will find this lovely —— creation at your dealer's in all the newest shades. . . . The —— bed is matchless for repose! Sensitive to the slight weight of a young girl, it will bring her sweet dreams.”²⁵

The average American editor and professor of short storywriting gives the same advice to the writer as the paper manufacturer gave to the business man. He tells the writer that his body of readers is only one

²⁵ *The Saturday Evening Post*, December 1, 1928.

woman multiplied. He is to consider his readers as one person and to make the veneer on his stories good enough to attract and sell that one person.

XXV

The magazine of large circulation scorns intelligence beyond a certain point. It communicates this scorn to the editor, the short storywriter, and the reader. If the editor were more than moderately intelligent, his sense of humor would not permit him to publish what he does publish; if the author were more intelligent, he could not write what he does write for any length of time without a nervous breakdown; and if the reader were more than moderately intelligent, he would refuse to purchase the magazine. Like the machine and the army, the mass production short story hypnotizes everybody's intelligence.

This state of affairs merits somewhat careful examination. It is all admirably summed up in Walter B. Pitkin's two rules for what he calls the "law of intensification" in short storywriting. "Repetition breaks down incredulity. Belief is induced by the mere habit of hearing or seeing." Mr. Pitkin considers these two statements so important that he prints them in italics. He goes on to point out that if you passed a billboard with the legend PERKIN'S PICKLES ARE THE PUREST every morning for three months on your way to the office, at the end of that time you

would believe the statement which the billboard had impressed upon your mind.

He advises the short storywriter to apply this principle in his writing, and analyzes at some length a short serial by an American writer as an example of excellent hypnotic technique. He states that if the story were subjected to rigid analysis, "it would fall to pieces like an old rag at the first harsh touch. Almost every situation in it is, strictly speaking, absurd." Yet he remarks: "This seasoned writer there performed a legitimate and highly artistic hoodwinking that few men can hope to rival."²⁶ I have not read the story to which he refers, and therefore cannot substantiate his judgment. I merely quote this illustration to show you how the wind blows.

Perhaps my point may be illustrated equally well by quoting the captions which appear underneath the titles of the short stories published in five issues of American magazines which were the first that came to my hand.

First magazine.²⁷

- 1) "A story of Love and the reckless hardihood of youth."
- 2) "A story of the eternal Cinderella and the Prince—of youth which owns everything."

²⁶ "How to Write Stories." By Walter B. Pitkin. New York, 1923. pp. 112-117.

²⁷ *American Magazine*. December, 1928.

Second magazine.²⁸

- 1) "The story of a gangster in the making."
- 2) "The story of a bridegroom's hectic honeymoon."
- 3) "A story of young love and a girl who got her man."
- 4) "The ninth story in The Happy Parrot series."

Third magazine.²⁹

- 1) "The love-battle of two men for a girl—and a struggle, also between the man and the woman in love and mated but opposed."
- 2) "By popular demand, —— brings his bride to America."
- 3) "For millions more, he makes the page a pleasure."
- 4) "Here is an unforgettable event."
- 5) "At this moment when all America is money-mad, —— has written a great, thrilling, significant story."
- 6) "American nature, 1928 model."
- 7) "No other, writing in the English language, can tell like —— the hot, violent loves and hates and battle-lust of Asiatic tribesmen."
- 8) "A strange sensational test of marriage, and of love."

²⁸ *Liberty*. November 17, 1928.²⁹ *Red Book Magazine*. December, 1928.

Fourth magazine.³⁰

- 1) "Story of a girl who tried to run away from Thanksgiving and love."
- 2) "Fascinating story of a girl who found herself the center of a mystery—and didn't like it."
- 3) "A mother-and-son story that will touch your heart."
- 4) "The story of a girl who ran away from a hard problem—and when she came back she found it answered."
- 5) "Announcing the discovery that all lovers are young even if they are fifty—and gray-haired."
- 6) "The story of a girl who believed glitter was enough—one should not ask for gold."
- 7) "Small as it was, the happiness of a girl's whole life was decided by it."

Fifth magazine.³¹

- 1) "A battle of passionate ambition and the dreams of early manhood."
- 2) "Enthralling romantic tale of intrigue."
- 3) "New realms of romance loom above the clouds."
- 4) "Virginia seeks and finds her solace in a gift of love."

³⁰ *Good Housekeeping*. (New York.) November, 1928.

³¹ *McCall's Magazine*. December, 1928.

Now it is to be observed that stories of this sort appear profusely in the cheapest magazines of other countries. On the other hand, the editor and the reader discriminate between good and bad work and usually know which is which. Most of the stories which I have read in the magazines from which I have just quoted captions would have been readily accepted by almost any American editor. They would have been accepted in the belief that they were serious work by almost any American reader. Perhaps some of them are.

In other countries, the intellectual leaders of the community cannot muster up any interest in this sort of story. In America, these stories are the favorite reading of most people who are listed in "Who's Who." The editors of the more pretentious magazines privately read with the greatest zest the stories printed by their supposedly less intellectual neighbors. I know this, because editors of such magazines have more than once bored me to extinction by retailing the plots of such shoddy stories.

xxvi

American short storywriters are totally irresponsible as a general rule, or at least they entirely refuse to assume artistic responsibility. They bang away as rapidly as possible on their little typewriters. The average magazine reader who is fed on their pap has

consequently no notion, or very little notion, of what artistic responsibility means.

Their stories discuss sex with a sniggering titillating curiosity. They pander to lawlessness. The villain is often "a good guy." The hero is often a "slick" salesman. The reader is encouraged to be greedy, hungry, and possessive. The ideal set before him is the captain of industry, who is pictured as an oppressive elderly Jehovah without a beard who outwits foolish cherubs as well as fallen angels.

xxvii

The American storywriter's lack of responsibility, and the average magazine reader's total ignorance of what artistic responsibility means, is the death of art and begets scorn of creativeness and hatred of art. This attitude is as apparent in the writer as in the reader. I know many writers of "best-sellers" whose sneering attitude toward their artistic betters is incorrigible. Their own fatuous complaisance assures them that they are the only writers who count. Most American readers accept them at their own valuation.

xxviii

The American short story lays strong emphasis on the value of time and money. "*Time is money.*" By emphasis on time and on money, and by concentration of an extreme sort on business, space is scorned.

Money impresses an American editor far more than literary worth. Any literary agent will tell you that if he does not screw up the price of an author's stories, that author's work becomes less marketable after a time. The attitude of a writer of "best-sellers" is usually thoroughly commercial. He frequently bullies the editor into ordering a series of his stories in advance, sight unseen. Furthermore the editor frequently fixes the publication date of the series before the stories are in his hands, and consequently the author has to write against time. As I have remarked before, most American short storywriters converse like stockbrokers. They gossip about the current rate on 'change of their fellow-writers, boast of the commissions they have been given and of the prices they have been paid, and have little other conversational resource.

xxix

Consciousness of space being regarded as a bad habit, the American short storywriter is usually ignorant or contemptuous of the value of spaciousness and leisure. Leisure is idleness, takes no account of time, and does not make money. Spaciousness in life is unknown to the writer, and therefore its value is not communicated by him to the reader.

The ideal way of passing leisure hours for most American short storywriters is to play golf with an

influential editor, let him win, and then sell him a story. This hatred of leisure and spaciousness is apparent in most American short stories. They are built for speed like racing cars. Their formula may be expressed briefly as follows. "Tighten up your story, screw it up or build it up to a climax, tack on a surprise ending, then pop! bang! over! Good-bye!"

xxx

Without free leisure and spaciousness, creativeness is impossible. The magazine of large circulation, being a mechanistic structure, knows its enemies, even though its editor and contributors may be unconscious of them. They are the saint, the hero, and the artist. Any suggestion in an American magazine of large circulation that these three types of humanity might be worth recognizing in America, should we happen to meet them, would be greeted with laughter and embarrassment. (Dead saints and heroes like Joan of Arc and Lincoln may be safely admired.)

Instead, the magazine of large circulation offers the American public a new mysticism of material things. Those who accept this mysticism find that it is a mechanical substitute for religion ("just as good"), and call it "Service." They have even gone so far as to suggest that Jesus Christ was a sort of John the Baptist heralding the young American business man who continually figures as hero in most Ameri-

can short stories. Perhaps they, at least, begin to suspect what deity they are serving.

A couple of years ago a radical magazine sent out a questionnaire to various American writers. It may be interesting to quote from a few of the questions and answers which were published.³²

Bruce Barton's reply to the question: "Why do you write?" was reported to have been: "My first ambition has been to make my family comfortable." When any American writer makes this reply to such a question, one is tempted to ask whether he could not help his family to make itself something else which would be more worth while, and whether he could not have achieved his aim equally well or better in another occupation.

To the question: "How would you define literary or artistic prostitution?" Upton Sinclair replied: "Lending the glamor and thrill of art to any ideals, standards, or ways of life less worthy than the best I know." But surely art is not primarily a matter of glamor or thrill. Upton Sinclair appears to conceive of art in terms of the motion-picture.

To the question: "Does the advent of the machine mean the death of art and culture, or does it mean the birth of a new culture?" Llewelyn Powys replied wisely enough: ". . . Motor cars are likely to become one of the greatest curses that have overtaken the

³² "Are Artists People?" *The New Masses*. January, 1927.

human race . . . surpassed only by syphilis." I would have you note the word "overtaken." Is it not high time that American culture overtook the motor car?

To the question: "What attitude should the artist take to the revolutionary labor movement?" Upton Sinclair replied: "The artist should be the soul of the labor movement. He should turn it from a business quarrel into a new step in civilization. The new culture will be like nothing we can imagine, because we live in our petty individualities, and cannot imagine how it would really feel to possess a social consciousness, and to share in mass emotions."

I am afraid that I agree with Upton Sinclair that we are painfully deficient in social consciousness, but I entirely take issue with him when he says that we cannot imagine how it would really feel to share in mass emotions. It seems to me that we live so entirely in mass emotions already that we find it difficult to imagine how it would really feel *not* to share in mass emotions. We are rotting with mass emotion. Upton Sinclair was the first man to point this out during our time of national hysteria immediately after the United States entered the war.

Edmund Wilson replied to the same question: "There can be no such thing as proletarian literature any more than there can be proletarian chemistry or proletarian engineering. . . . There are already great proletarian names among the arts and sciences; but

they are the great names of artists and scientists, not of proletarians."

I agree with him heartily. I have read too many Catholic poets and Negro short storywriters. A poet is a poet in spite of his creed and a short storywriter is a storywriter in spite of his race. His distinction is attained through his practice of his art as a human being, and not by reason of his religion or his race or his social views. These will never hinder him or help him, except implicitly and indirectly, but standardization is now in a fair way to ruin him.

xxx

Let us now gather together the strands of our analysis of the American short story. I shall recapitulate briefly the thirty characteristics of the short story which we have already considered.

1. The American short story must be as accurate as possible. It must be photographic and careful to include the most minute and irrelevant details. It must make no mistakes of omission or inexactness.

2. It works to a predestined pattern, largely determined by Poe, O. Henry, and magazines like *The Saturday Evening Post*. It is therefore Calvinistic in its activity and pleasing to the Puritan mentality whose passion is to predestine as well as to be predestined.

3. It is as cheap as possible. Its emotions are cheap,

its characters are cheap, and the victories of its heroes are cheap. Most of all, its saccharine sentimentality is cheap.

4. In the American short story, the heroes have no nervous factor, or are at least designed to have none.

5. The American short story is impersonal. It seldom creates character, but usually manufactures "types."

6. It is designed to be absolutely interchangeable with its fellows.

7. If the American short storywriter achieves a satisfactory mechanical product which the magazine of large circulation finds acceptable to its advertisers, he is not allowed to practise literary birth control. He reproduces his original story as frequently as possible.

8. When he manufactures a new short story, his concern is almost entirely with the technique of manufacture.

9. Any deviation from the accepted pattern of the American short story is "error," and the storywriter rash enough to deviate cannot easily find a publisher for his writings.

10. American magazines of large circulation have no use for creativeness. They go on with their set program and are perfectly certain that creativeness is a regrettable function.

11. The ideal put forward for the writer by the

American editor is standardization. The writer must always write the same story. By extension, or by contagion if you like, the magazine of large circulation and the advertisers behind it impose this ideal of standardization upon the reading public.

12. The writer is encouraged to write silly stories in a silly verbose manner. It therefore becomes necessary for the magazine of large circulation to make the silly stories it publishes seem important.

13. The magazine of large circulation being designed to make money for man, its passion is to make as much money as possible as quickly as possible. Its exultation is therefore in speed. Its gospel is that of getting rich quickly. It imposes speed values upon the writers who contribute to its pages, corrupting them with money in order to gain its end. By extension or contagion, it imposes the same speed values upon the reading public.

14. The magazine's craving for speed puts movement and patter at a premium. Stories must be "snappy."

15. Continuous movement and patter beget restlessness, first of all in the writer, and secondly, in the reading public.

16. Restlessness rapidly wears out the writer's mind. It rusts the mind of the reading public and finally dulls and wears out its creative response.

17. In order that the creative response of the read-

ing public shall not wear out until the very last possible moment, the magazine of large circulation harnesses men to its needs, whether these needs are of an editorial, advertising, financial, or other nature. These men must coddle it, feed it, and give it medical attention. It demands concentrated attention from men at every moment who must make sure that it is able to work with the utmost speed, smoothness, and exactness. They must also see that it "circulates," that it keeps moving. The magazine controls the men who are associated with it and, in order to maintain their self-respect, it encourages them to believe that they control it.

18. The American magazine is hungry for power,—financial power, political power, even judicial power. It needs endless power. Hunger begets greed and power begets power. The magazine hunger for power enslaves men. First of all, it enslaves the men who are most closely associated with it,—its writers, its editors, its advertising men, its machine-tenders, its owners.

19. The hunger of the American magazine to use power, and to create more power for itself to use, encourages mass production. It encourages this hunger and this mass production in the men who claim to be its owners. This mass production takes two forms. The magazine demands mass production of stories and it engages in mass production of public opinion

and standards. It values the latter for two purposes of its own: first of all, in order to create a mass mentality responsive in a friendly way to its program of power; secondly, in order to make sure of a supply of human beings in largely increasing numbers to purchase its own standardized products and the standardized products of its advertisers, who in the long run support, keep, and own its owners.

20. The American magazine imposes conformity upon the public, first of all as an ideal, and then as a social necessity. Its own life depends upon conformity and it relentlessly insists upon it. This conformity is imposed in at least three directions. Writers and editors must approximate as nearly as possible to its rhythm, and do the same things all the time at the same speed. This speed is dictated by the insatiate hunger of the magazine. Secondly, the stories it publishes being all alike, and the goods it advertises being all alike, the magazine desires that the consumers of these stories and of these goods shall be all alike, as otherwise they might not choose to consume the standardized article. Thirdly, it demands uniformity from all its so-called owners on penalty of loss of ownership. It makes this demand through its advertisers, who advertise in its competitors as well.

21. The magazine of large circulation is in continual warfare with other magazines of large circula-

tion. The result is competition, first of all for circulation, secondly for advertising, and thirdly for authors.

22. One result of this competition is continual attrition. Creativeness disintegrates, characters are atomized, the story and its readers are leveled down. Being speedy, restless, and competitive, the magazine is quite careless about the quality of the material it employs, although it demands reasonable uniformity in any given relative quality of that material. I use the word "material" advisedly, as in this market stories are regarded by the writer, editor, and advertiser as a commodity like soap.

23. As a corollary of this, veneer makes its appearance. Veneer conceals defects and poor quality, as I have said before. This veneer usually takes two forms; first of all, emphasis on the sterilized anæmic thing called "culture;" secondly, a deft, slick patter.

24. Competition between magazines requires self-advertising, and it is easier to advertise a veneered short story than to advertise an unveneered one. Apart from self-advertising, the industrialized magazine of large circulation is built on the gospel of advertising.

25. The magazine of large circulation scorns intelligence beyond a certain point. It communicates this scorn to the editor, to the short storywriter, and to the reader. If the editor were more than moderately intelligent, his sense of humor would not permit him to publish what he does publish; if the author were

more intelligent, he could not write what he does write for any length of time without a nervous breakdown; and if the reader were more than moderately intelligent, he would refuse to purchase the magazine. Like the machine and the army, the mass production short story hypnotizes everybody's intelligence.

26. American short storywriters are totally irresponsible as a general rule, or at least they entirely refuse to assume any artistic responsibility. The average magazine reader who is fed on their pap has consequently no notion, or very little notion, of what artistic responsibility means.

27. This is the death of art and begets scorn of creativeness and hatred of art.

28. The American short story lays strong emphasis on the value of time and money. "*Time is money.*" By emphasis on time and money, and by concentration of an extreme sort on business, space is scorned.

29. Consciousness of space being regarded as a bad habit, the American short storywriter is usually ignorant or contemptuous of the value of spaciousness and leisure. Leisure is idleness, takes no account of time, and does not make money. Spaciousness in life is unknown to the writer, and therefore the value of it is not communicated by him to the reader.

30. Without free leisure and spaciousness, creativeness is impossible. The magazine of large circulation, being a mechanistic structure, knows its enemies, even

though its editor and contributors may be unconscious of them. They are the saint, the hero, and the artist. Any suggestion in an American magazine of large circulation that these three types of humanity might be worth recognizing in America, should we happen to meet them, would be greeted with laughter and embarrassment. Instead, the magazine of large circulation offers the American public a new mysticism of material things. Those who accept this mysticism find that it is a mechanical substitute for religion ("just as good"), and call it "Service."

It is now in your power to compare the natures of the machine, of the modern army, and of the American short story. I hope that you have maintained a reasonably combative attitude toward me throughout this detailed analysis. I have tried very hard to be dispassionate, but my prejudices are certainly quite as likely to influence my judgment as your prejudices are likely to influence yours.

I wish you would pause at this point and straighten out as clearly as you can the personal conclusions to which these comments of mine have led you. When you are quite sure of your own mental attitude, we shall be in a better position to study together the more general problems of American life which are raised by your conclusions from this analysis as well as by mine.

CHAPTER FIVE

So far it has been necessary to handle one by one a great number of platitudes, and to turn them over in order to see how far they are related to one another. Platitudes, which are dead when unrelated, often come surprisingly to life again when the pattern into which they fit is disclosed. In a mechanical civilization especially, the elements of life must be fitted together like a jigsaw puzzle if we are to discover successfully the pattern of that civilization. I am sorry if the pieces which I have fitted together are dusty, but I do not apologize for their dustiness. Let me add one more dusty commonplace to the others before going on with this study of machinery, mechanistic structures, and the American short story.

Those who discovered, conquered, and developed America were Puritans. Their line is uninterrupted from the Pilgrim Fathers to Calvin Coolidge. Puritans are men who reject external authority. To what extent they do this wisely or unwisely it is not for me to discuss here. There is a *via media* between absolute authority and anarchy. The only point which I wish to emphasize is that the Puritan, when he rejects external authority, sets up an internal authority which

he calls "private judgment." This private judgment of the Puritan may well be worthy of respect so long as it is a sincere judgment on the value of his own conduct. Unfortunately, it tends to claim authority as a private judgment of other people, and to substitute itself in place of the older sanctions as an absolute external authority, which must be obeyed by those whose private judgment, not being Puritan, is manifestly to be regarded as of an inferior sort. This is, as I have said, another dusty platitude, but you will soon see what place it has in the American scheme of things and what effect it has on life and literature generally.

Industrialism, it has been noted many times by European historians and observers, is born, develops, and takes deepest root in Puritan, that is to say extreme Protestant, communities.¹ It is not an accident that the Industrial Revolution began in Northern England, in a Nonconformist community which had rejected earlier than other parts of England the most civilized traditions of the race. Nor is it an accident that industrialism on a large scale spread more rapidly from England to America and to Germany than to other countries. Finally, it is inevitable that the new

¹ See Max Weber's thesis, "*L'éthique protestante et l'esprit capitaliste*." Also Bernard Groethuysen's "*Origines de l'esprit bourgeois en France*," Paris, 1927, Tome I.; R. H. Tawney's "*Religion and the Rise of Capitalism*," London, 1927; and Bertrand Russell's article, "*The New Philosophy of America*," *Fortnightly Review*, May, 1928.

mysticism of machinery should arise in so essentially a "protesting" state as Bolshevik Russia, in which it is of great interest to study the birth of a new Calvinistic Puritan determinism, however little this determinism may claim to have in common with John Calvin, the Pilgrim Fathers, and Calvin Coolidge. Its ideology and most of its stimuli come directly from industrial America. Taylorism and the Gary Plan are direct offshoots of capitalism.

The noticeable connection between Puritanism and machinery, which was apparently first noted by Max Weber, has been discussed by many writers in different countries during the past few years, notably by Bernard Groethuysen, R. H. Tawney, and Bertrand Russell. Bertrand Russell has stated as emphatically as I do that "it is no accident that the only great industrial countries are Protestant."² Edgar Mowrer points out that a French sociologist has called us "almost a theocracy of efficiency."³ This phrase clearly links Calvinism and industry together.

It is furthermore possible to observe how Puritan industry has begun to shape a new theology based on industry. This new theology in an inverted form has even passed from the hands of the industrialists to that of the socialists. As Bertrand Russell says: "Under the influence of industrialism, people have come to

² "Leisure and Mechanism," by Bertrand Russell. *The Dial*. August, 1923.

³ *op. cit.*, p. 91.

believe more and more in the omnipotence of man; they think there is no limit to what human beings can do to obviate natural misfortunes. Socialism is a form of this belief.”⁴

This attitude is obviously not only anti-spiritual but anti-intellectual. A machine has neither soul nor developed intelligence as yet, and I see no reason to suppose that it will ever acquire either except in so far as it utilizes our souls and our developed intelligences to serve its own ends. Since this is the case, the American worship of the machine tends to substitute machine processes and machine activities of every sort for human processes and human activities. It also tends to conceive of human beings as patterned machinery and to act toward them accordingly. The behaviorist psychology, of which we shall hear more later, is a striking example of this tendency. Now, as Mr. Mowrer has pointed out, the machine is itself a naked embodiment of purpose and will.⁵ It is therefore not surprising that the ideal set before American youth and undeveloped American manhood is also a naked embodiment of purpose and will. All that I have written previously in this book is a continuous illustration of this fact.

Simultaneously with this glorification of the machine the general tendency in American life is to

⁴ “Sceptical Essays.” By Bertrand Russell. London, 1928. p. 177.

⁵ *op. cit.*, p. 90.

glorify mankind fatuously as something unsurpassable. The machine flatters man in his illusion of illimitable progress by creating new desires, by transforming these desires into needs, and then by responding to these needs at the expense of the spiritual man who is steadily emptied of all his creative power until he approaches perilously near a state of vacuity.

As H. M. Tomlinson has recently remarked: "The still small voice will have to adjust itself to the measure of things of these latter days, or it will never be heard again; not even a good wireless set will pick it up. When man in megalomania sees himself of such a size and consequence, then Creation itself is diminished to a mere background for his postures; the very sun is nothing but a beam to illuminate the stage for him. . . . The distinctions between things tend to fade; they merge into a grey sameness, when by changing the range of an instrument on a table—bought at the stores—by a twist with the fingers we listen first to Berlin, then to Madrid, and then think we hear music of the saxophones in Philadelphia."⁶ I fear that we are beginning to prefer the music of the saxophones to the music of the spheres.

Nature abhors a vacuum. Every new want created by machinery is a new vacuum. These new wants are against nature, for man gets emptier and emptier the

⁶ "Man—the Mechanised Automaton." By H. M. Tomlinson. *The Sphere*. July 9, 1927.

more he is filled. Allow whatever margin of error you like to the conclusions drawn from the intelligence tests in the American army during the war, and you will still find it difficult to believe that the American mind as a general rule is not fairly empty.

Now the new industrial determinism, as I have previously pointed out, has a religion of its own which takes the form of a mystic materialism. This mystic materialism is saturated with romanticism in all countries in which it has taken root profoundly. There is a romanticism of the machine which has found important imaginative expression for a generation or more in the most industrialized European countries. It is beginning to find imaginative expression now in our own country.

The romantic mysticism of the machine is either imperialistic or bureaucratic. With conservatives it is imperialistic and with radicals it is bureaucratic. In either case it is purely materialistic, less frankly so with conservatives than with radicals. The justification of this materialism, or its damnation, I leave as a matter for discussion. I would simply chronicle the fact that it exists and point out that the radical is usually more honest about it than the conservative. Conservative industrial mysticism is called "Service;" a radical industrial mysticism is called "Socialism."

In England the conservative mystic romanticism of the machine may be typified by Kipling, the radi-

cal romanticism by Wells. It may be noted in passing that radical mystics of the machine tend to become conservative more or less unconsciously as they pass middle age. It seems probable that both Kipling and Wells admire the energies of Lord Melchett, formerly Sir Alfred Mond. Certainly Wells does. Melchett is the new Wellsian superman if I read "The World of William Clissold" aright.

In Belgium the worship of the machine inspired the most important lyrical efforts of Verhaeren, the greatest poet of this industrial nation. Verhaeren, who wrote in French, greatly influenced France before the war, though a lyrical determinism of the machine was expressed more powerfully and with far greater national influence by Zola and his followers. The naturalistic efforts in Germany before the war of a whole school of novelists and playwrights was also designed to hymn an industrial civilization. Both French and German poets wrote odes to the dynamo and addressed prayers to "Our Lady of the Factory."⁷ Even so fine an artist as Jules Romains pointed the way in his Unanimist philosophy and poetry toward a cellular manner of regarding a street, a city, and even a nation. A similar cellular organization on a stupendous scale of the German nation was one of the primary causes of the war. Since the peace, all the

⁷ See the poems of Barzun, Beauduin, Guilbeaux, and others.

world "goose-steps" to the rhythm set by the machine.

The proletarian fiction and poetry of Bolshevik Russia is frequently an insane panegyric of Taylorism, machinery, efficiency, mass production, mechanistic human structures, and Puritan conformity. The ideal of the *proletkult* is a cellular organism very much like the atomic structure of a machine in its essence. (I have already suggested that machines know all about atomic structure.) Under the stress of revolutionary enthusiasm, this cellular organism has come to resemble a swarming hive of bees and has the same enthusiasm as bees have in carrying out together work dictated by sheer natural instinct. But something more creative is surely demanded of a nation.

The ideology of machinery reaches fantastic heights in post-revolutionary Russia. Pokrovsky has even called Lenin a "special appliance."⁸ Rene Fülöp-Miller says that "when Pokrovsky, the great historian of Soviet Russia, wanted to describe for the proletarian masses the significance of Lenin for the revolutionary development of humanity, he explained the Communist conception of the phenomenon 'Lenin' in words which sound utterly fantastic to Western ideas: 'We Marxians do not see personality as the maker of history,' for to us personality is only the

⁸ "The Mind and Face of Bolshevism." By René Fülöp-Miller. London, 1927. p. 30.

instrument with which history works. Perhaps a time will come when these instruments will be artificially constructed, as to-day we make our electrical accumulators. But we have not yet progressed so far; for the moment, these instruments through which history comes into being, these accumulators of the social process, are still begotten and born in an entirely elemental way.' ”⁹

These words are not so utterly fantastic in our ears as Herr Fülöp-Miller believes. In our minds personality is rapidly coming to be regarded as only the instrument through which *machinery* works. As my discussion of “robots” makes clear, America is nursing a pious hope that the time will come when these instruments will be artificially constructed, as to-day we make our electrical accumulators.

The Briusov Institute in Russia is now endeavoring to obtain chemical formulæ for poetry, thereby emulating one of the Maxims who once wrote a book weighing several pounds in order to demonstrate that by means of formulæ any scientist or engineer may easily compose sonnets rather better than those of Shakespeare. I have seen no samples of the poetry built in the Briusov Institute, but I fear that it will be no better than the curious sonnets with which Maxim challenged us.

⁹ *op. cit.*, p. 7.

There can be no doubt, however, that many Russian writers of verse are glorifying machinery in an extraordinary manner. I subjoin a few quotations from various contemporary Russian writers.

"Be athletically valiant, with tense muscles,
Full of the religion of action!
Your soul!

Steam, compressed air, electricity!!"¹⁰

"To understand the iron tongue, to hear the mystery of a revelation;

To be in the factory daily, to be there, is ecstasy!"¹¹

"There he is—the Saviour, the lord of the earth,
The ruler of titanic forces—

In the roar of countless steel machinery,

In the sparkle of suns of electricity."¹²

"Great eternal Labor! To thee be the praise!

With thy dew didst thou bathe us in the foundry's furnace,

With a masterly hand didst thou weld into a single rhythm

The slow beat of hearts and the rumble of anvils."¹³

"Every day of ours is a new chapter in the Bible.

Every page will be great to thousands of generations.

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¹⁰ By Mayakovsky. See Fülöp-Miller. *op. cit.*, pp. 158-9. Translated by F. S. Flint and D. F. Tait.

¹¹ By Sadofiev.

¹² By Kirillov.

¹³ By Ionov. The second, third, and fourth extracts are taken from George Z. Patrick's article, "The Iron Messiah." *Slavonic Review*. December, 1927.

Isn't yesterday crushed, like a dove
 By a motor
 Emerging madly from the garage?" ¹⁴

The spirit reflected in these poems is evidently the same as that which governs "The Gastev Institute for the Scientific Organization of Work and the Mechanization of Man." You will note that the name of this institute leaves no doubt in anyone's mind as to its purpose. It claims to manufacture out of human beings "directive apparatus," "administrative machinery," "management regulators," and "labor machines." As Gastev remarks, "We must make the conditions of the animate working machine as favorable as those of the inanimate one." Fülöp-Miller informs us that the Bolsheviks nevertheless regard Gastev as antiquated in his methods. "His ideal is the *petit bourgeois* craftsman, his aim is to make man a hammer, a file, or a knife. But the new proletarian epoch stands in the sign of the great modern machine, the mass man is to be a part of a mighty aggregate of turbines, and not transformed into an antiquated cobbler's awl." ¹⁵ I suspect that John Gould Fletcher was right when he remarked that "we become more

¹⁴ By Marienhov. Translated by Babette Deutsch and Avrahm Yarmolinsky. Quoted from their anthology, "Modern Russian Poetry," New York, 1921. p. 179. An interesting series of articles on Russian machine poetry by John Cournos appeared in *The New Europe* for 1919. Mr. Cournos translated many poems.

¹⁵ Fülöp-Miller. *op. cit.*, pp. 210-213, *passim*.

Bolshevik individually as we become more uniform generally.”¹⁶

The Bolshevik influence, united to a passionate French admiration of the American cinema and the American dynamo, has prompted the shell-shocked and disillusioned literary and artistic youth of France to proceed from Dada to *surréalisme*, and *surréalisme* in turn is having a very muddling effect on most young American writers and artists who have visited Europe since the war.

Finally it may be noted with interest how New England Puritanism, after passing through a somewhat chequered history from the days of Abolition to those of Prohibition, manifests an excited and benevolent interest in Bolshevik Russia, so far as its idealistic wing is concerned, thus offering an explanation of the curious and otherwise inexplicable relationship existing between New England and the radical American press. Calvinism in Russia calls to Calvinism in New England and is heard. The less idealistic wing of New England Puritanism is, of course, frankly puzzled and shocked.

John Gould Fletcher in an interesting article on Nihilism points out the contrast which remains between the forms of spiritual surrender in the two countries. “The Russian soul in its deepest and most

¹⁶ “America and the Future.” By John Gould Fletcher. *The New Age*. June 3, 1926.

profound abysses wishes for mind to be abolished, and for love alone to prevail. It is therefore profoundly nihilistic, denying the reasoned but impersonal law of God for the sake of the human heart. . . . The American . . . desires in his inmost being to destroy feeling and to live by the light of the mind alone. He is, therefore, profoundly nihilistic, denying the love of his neighbor for the sake of the final triumph of the brain.”¹⁷ Unfortunately, the final triumph of the American brain would appear to result in bigger, better, and busier machinery.

¹⁷ “The American Mind. VI. Nihilism.” By John Gould Fletcher. *The New Age*. January 21, 1926.

CHAPTER SIX

I HAVE found it unnecessary to touch more than lightly upon the close connection which exists between Puritanism and industry. I shall be content if you will bear in mind that a Puritan is an extreme "Protestant," a man who protests and whose protest takes a religious or pseudo-religious form. He may be a Catholic, a Methodist, a Mahometan, or a Jew. There are great Puritans as well as small Puritans, but all great Puritans have one essential characteristic by which they may be recognized. They are witch-burners, whether they respond to the name of Calvin or to that of Lenin.

The relationship between Puritanism and imperialism now calls for some analysis. As industry is the framework of the machine, so imperialism has obviously come in our days to be the framework of armies. Imperialism cloaks itself, though this is little realized, in many other forms than that familiarly known as "shouldering the white man's burden." Like industrialism, one of its noteworthy characteristics—the very form it assumes—is an extreme romanticism. By romanticism I would be understood as suggesting

the tendency toward emotional vagueness and the use of "cosmic" expression at the expense of the concrete.

Machines have been welding men together into a romantic mysticism of solidarity. First they welded the proletariat together, then the "owners," and now they are welding together the international bankers and financiers. Both the proletariat and the capitalist begin to speak of an ideal world state. Such a world state, as they conceive it, is bound up in a single structure of machine solidarity. In its final bureaucratic outcome, the result would be the same whether it were achieved through the Third Internationale or through international finance. One begins to suspect that the guiding minds behind these international proposals are prepared to make a benevolent alliance with either or both.¹

Walter Meakin has shown in his book entitled "The New Industrial Revolution" how inevitable this mysticism of solidarity was in Germany, the most industrialized and therefore the most malleable of European nations. Now the word "malleable" is part of a machine language, and it is significant that we are already beginning to speak about the "malleability" of peoples. I think you will find it interesting

¹ As this book was about to go to press, I found the following significant statement in Spengler's "The Decline of the West." (London, 1928. Vol. 2. p. 506, footnote 1.) "Practical communism with its 'class-war'—to-day a long obsolete and adulterated phrase—is nothing but the trusty henchman of big Capital, which knows perfectly well how to make use of it."

to search your minds for other expressions which tend to be used with regard to human beings, although they are primarily mechanical terms.

Curiously enough, it may be observed that extreme romanticism of a vague and "cosmic" sort is almost invariably a characteristic of those who claim to be materialists. If they are imperialistic materialists, they talk about "the white man's burden," which is certainly not a concrete concept. If they are radical materialists, they talk about "the brotherhood of man," which is even less concrete, not realizing that one brother in the heart is worth a million in the bush.

The French historian, Baron Ernest Seillière, who appears to be almost unknown in English-speaking countries, who is greeted with shrugs in France, and who is usually hated and read in conservative Germany, but whose studies of imperialism, continued over more than a generation, are among the most profound contributions I know to an understanding of our times and of the immediate past,² has suggested that there are four kinds of mystical imperialism observable in our world, and that however much opposed they may seem to be to one another, they are nevertheless children of the same mother. He dis-

² The best introduction to his work, somewhat marred by special partialities of the author, is "*Une nouvelle psychologie de l'impérialisme.*" By Louis Estève. Paris, 1913. Seillière is known to Irving Babbitt whom he appears to have profoundly influenced, but there are fundamental issues on which the two men part company.

tinguishes the following types: racial imperialism, æsthetic imperialism, sexual imperialism, and social imperialism.

The first and the fourth have special affinities, and represent herd qualities rather than individual qualities. Likewise, the second and the third have special affinities, and represent individual rather than herd qualities. Furthermore, any or all of these four varieties of mystic imperialism may unite to some degree. On the whole, however, the first and the fourth fight against the second and the third, and those who control and rule nations or groups with herd qualities such as America and Russia possess tend to exploit these herd qualities for the sake of their own individual aggrandizement.

Imperialism, as Seillière defines it, is any purposive activity of the selfish will-to-power. In America, I would suggest that æsthetic and sexual imperialism, as to the value of which I intend to express no opinion here, have found literary and artistic expression to so noticeable a degree during the past decade or so as an inevitable reaction from the racial and social imperialism of the Puritan which has always ruled American life, but which came out with far more hostility into the open against the non-Puritan majority in the nation as soon as America entered the war. The only qualification I care to make is that race imperialism is inclined in some degree, when most ex-

treme, to show a marked sexual aspect. German life during the past forty years reveals this to a considerable extent.

I would suggest as a fruitful subject for investigation the analysis of each of these four kinds of mystic imperialism in American life. Such an analysis should first be pursued historically, and then examined in its psychological, political, religious, sexual, intellectual, and artistic manifestations to-day. This is a virgin field for the explorer. Our racial and social mysticism might be explored with regard to the negro, the Spanish-American war, Mexico, "hundred-per-centism," and "Americanization." Our æsthetic and sexual mysticism might be explored with regard to New England culture, Greenwich Village, the radical novel, and companionate marriage. I suggest here only six or seven out of many hundred possible topics.

Industrial mysticism is partly racial and partly social. The creative reaction toward æsthetic and sexual mysticism of an imperialistic sort is a natural and inevitable reaction from industrial mysticism. As a recent English writer has remarked: "While economic and political life has become mechanized social life has become anarchic. Now that every man, woman, and child is economically and politically organized by machinery, hopelessly overwhelmed by a system, they insist more and more in social life on 'the right of self-expression.' Public sympathy goes

out to the man or woman who deserts wife, family, and friends 'to live his (or her) own life,' while the man who refuses to be the fodder of a system is regarded as a rogue, the deeper respect for him being suppressed."³ Most young writers and artists wish to model their lives on that of Rimbaud or Gauguin. Industrialism has, in fact, created a new Byronism of the middle classes. The fact is as evident in America as in Europe. Those who have seen American writers and artists in Europe may well ask whether they can be trusted, as Edgar Mowrer picturesquely puts it, "to live outside the twelve-mile limit."

Such an exploration as I have proposed would reveal clearly enough a common attitude of romantic escape in every aspect of American life which is examined, and might suggest the reflection that America was settled in a mood of romantic escape from England, that the American Republic was founded in a mood of romantic escape from Europe, that big business developed out of the mood of romantic escape from life, that machinery was designed to take the place of men desiring romantic escape from labor, and that the modern American, enslaved by the machine to his surprise, tries to find romantic escape from the machine in a radicalism which is unfortunately as mechanistic as the machine from which he is fleeing. The organized proletariat and the cor-

³ "Notes on Mechanism, III." By R. M. *The New Age*. September 1, 1927.

poration are very similar types of mechanistic structure.

I might furthermore suggest that romantic escape is the driving power of most significant American achievements in the arts since 1916, as it had previously been the driving power of Melville, Poe, Hawthorne, and many another writer. It may be remarked that the founders of the American Republic had the same profound admiration for Rousseau as the modern American radical. Rousseau's well-known persecution mania has its analogies in both cases. Please do not interpret this as a profound and basic attack upon Rousseau, the republic, or radicalism, but remember that Rousseau was born in Geneva, the home of Calvin, that he was the son of a watchmaker, and that watchmaking was as near to machinery as a man's environment could very well extend in those days. His impulse toward romantic escape is therefore quite comprehensible.

It is the romanticism of Rousseau and the romanticism of America which I would have you specially note. Romanticism, after adolescence at least, is the result of disillusionment attended by fear and loneliness. It is almost always the search for a God to replace a God against whom the romantic has protested, rightly or wrongly. Such a search is always conditioned by the romantic's fears. The thing he fears most is apt to guide him in the direction of

his worship. The thing he fears most is the thing he is most inhibited from recognizing as the object of his fear. The thing Americans fear most is the tyranny of the machine, and they are inhibited by the intensity of their fear from recognizing machinery as the object of that fear. As Garett Garrett has remarked: "The spirit of man is in his machines. He sees it and is afraid. So also his spirit was in pyramids and temples."⁴

At the same time Americans are quite aware of the machine's power and vastness, and therefore the machine naturally suggests itself as the nearest and most probable God. It presents itself to us as something worthy of worship, and the rites which it prescribes are presented to us as the most suitable rites for a new religion. Recently Henry Ford contributed to an American magazine an authorized interview entitled "Machinery: The New Messiah."⁵

The most suitable comment on this situation has been made by Garett Garrett. His diagnosis of the fear which inspires this new worship, is bitingly accurate. "The machine itself is not terrifying. What possesses the machine may be. This is man afraid of himself."⁶ In other words, machines are literally possessed. They are possessed by man afraid of himself, and they act accordingly. Is it not time that we regained possession

⁴"Machine People." By Garett Garrett. *Saturday Evening Post*. April 28, 1928.

⁵*The Forum*, 1928.

⁶"Machine People."

of ourselves and thereby also possession of the machine?

In order to worship the machine, which is really only a fetich, it is necessary that we should be primitive. We have one primitive quality already, and an important one: fear. The machine which we are tending more and more to regard as a divinity, and to worship mystically as such, finds it desirable to reduce us as far as possible to a primitive level of mentality. It is accomplishing this reduction successfully at great speed. It also finds it desirable that we should recognize what its godlike qualities are, and that we should imitate them, for religion is essentially the human imitation as far as possible of the virtues of divinity.

This new divinity has at least thirty "virtues,"—(all the qualities of a divinity must be virtues.) We have already discovered that armies tend to have the same thirty "virtues." An army is the nearest approximation to a national mechanistic structure so far achieved. The mechanical modifications of a nation necessary to turn it into an army have been already realized. The last step toward the achievement of such an army was taken by France not long ago when it passed a law conscripting all women, children, and alien visitors for service during the next war.⁷

⁷ As this book goes to press, a similar American bill is being drafted in Washington.

CHAPTER SEVEN

THE fundamental need of any organism, human or otherwise, which has the power of motion, is self-expression. The machine seeks self-expression. Hitherto its form of self-expression has been shaping objects out of material. After reading what has gone before, you have no doubt rather more than a dim suspicion that the machine has become interested recently in shaping a mechanistic structure as like itself as possible out of the American people.

Any mechanistic structure tends to become a mere producing machine with men as cogs. A mechanistic structure is measured in terms of brain-power rather than horse-power. I wish to make this statement more precise. Our idea of brain-power is fortunately still based on quality rather than quantity. The machine's idea of brain-power is different. It is based on quantity rather than quality. Its chief interest in brains is to apply as many of them as possible in as simple and elementary a form as possible in order to drive a human mechanistic structure uniformly at the same speed all the time toward its own ends.

Brain-power is the horse-power of the mechanistic structure. For this reason the machine desires the

brain-power which it harnesses to its own ends to be as uniform as possible. We shall see later that certain scientists hope to achieve this uniformity in human brain-power by a form of psychological education known as behaviorism. By means of behaviorism the machine has a chance of turning the American mind into a circulating decimal.

Furthermore, it hopes to establish alternating currents in the American mind to feed its own activity. Two alternating currents appear to be already developed well beyond an elementary point. They are both mechanistic structures. One of them is known as the proletariat, and the other is known as the corporation. The operating instrument of these two alternating currents tends more and more to be a fourth Internationale known as international finance, which already disposes of a mysticism which is hypnotic. It has been enthusiastically described by H. G. Wells in "The World of William Clissold" and "The Open Conspiracy."¹

International finance is very much interested in that odd offspring of moribund Darwinism known as crowd psychology, in the spread of propaganda throughout the world by means of crowd psychology,

¹ A new monthly review, "The Realist," is appearing in England which offers a tolerably clear cross-section of the ideas which H. G. Wells wishes to be promulgated by such an "open conspiracy." Its editorial board includes men of widely diverse occupations from Arnold Bennett to the chief chemist of Brunner, Mond & Co., Ltd., who unite in preaching "scientific humanism."

and in rationalization based on a direct application of this pseudo-science to industry itself. I do not propose to enter here upon any detailed examination of crowd psychology, but I should like to ask one fundamental question. Would the data collected by crowd psychologists have been observable to any useful degree before the industrial era except at moments of general European enthusiasm or fear based upon a crisis in European history?

The fact that we study crowd psychology nowadays merely points the way to the other fact that we are all busy considering how best to build up mechanized structures. Now mechanized structures can only be built up through the application of crowd psychology to what is known as rationalization. The future of the mechanistic structure seems to depend upon rationalization. All signs point to the probability that under the reign of Hoover and Melchett rationalization will reach perihelion. I would therefore suggest to American and British engineers that it is high time for them to begin to calculate strain. They will be wise not to depend upon machines to make such a disinterested calculation for them.

The German worker's attitude toward rationalization is worthy of examination at this point. I quote from Meakin's book the joint declaration of the General Federation of Trade Unions and the organizations of salaried employees and officials: "Rationali-

zation is necessary. It is a task both for separate concerns and whole industries. Its aim must be a reduction in the costs of production and lower prices, together with a simultaneous increase in wages. Only by means of an increase in mass purchasing power created in this way can the workless become re-employed. The method, often practised at present, of rationalizing without simultaneous lowering of prices and raising of wages must produce a crisis of over-production. The process of rationalization must be carried through with the co-operation of works and economic councils, and with the avoidance of social hardships. The better use of labor power is to be promoted. The choice of directorship and management must be liberated from unessential influences.”²

Knowing as we do what the process of rationalization is, what it costs in the form of new machinery, plant depreciation, and discarded human labor, it is obvious that these suggestions, which are really veiled demands, cut clean across the whole pragmatic philosophy of rationalization. Applied to rationalization, they are Utopian: applied to human life, they are obviously reasonable and merely decent. The conflict between rationalization and these proposals will be interesting to watch during the next few years.

Rationalization only benefits the machine, so far as I can see, but it appears to have captured the

² *op. cit.*, pp. 214-215.

imagination of both workers and employers in Europe to a marked degree. They are already half-infected by the machine mind, and show a disposition to work together in order to satisfy the hunger of the machine for rationalization.

The demands of the German workers which I have just quoted, as well as the conferences between Lord Melchett and English trades union leaders, point toward joint councils in both England and Germany whose business will be to confer together in as friendly a manner as possible as to how they may best satisfy the hunger of the machine. If this new brotherhood of man should prove reasonably lasting, it would please the machine very well. Man's enslavement to machinery would soon be tolerably complete. Labor would become something like perpetual motion for the benefit of the machine. It is already extremely fluid.

We have seen that the machine has achieved fairly complete control of the American people, though this control depends entirely on the American people's inability to realize what is happening. This lack of realization is due first of all to hypnosis induced by the rhythm of the machine, and afterwards to the extension of that rhythm into all fields of American life by a secondary hypnosis in which not only the social pressure encouraged by the machine, but also the newspaper, the radio, the cinema, and the Ameri-

can magazine of large circulation act prominent parts.

Many years ago Henry Adams clearly perceived this tendency of America to copy the machine's rhythm and speed and to surrender itself to the machine with an ascetic religious fervor. "The typical American man had his hand on a lever and his eye on a curve in his road; his living depended on keeping up an average speed of forty miles an hour, tending always to become sixty, eighty or a hundred, and he could not admit emotions or anxieties or subconscious distractions, more than he could admit whiskey or drugs, without breaking his neck. He could not run his machine and a woman too; he must leave her, even though his wife, to find her own way, and all the world saw her trying to find her way by imitating him."³

We have observed the relation between Puritanism and industry, and Puritanism and imperialism. It is fairly clear to us that the virtues of a machine waken a more sympathetic response in a Puritan temperament than in any other temperament. In fact, we regard the Mediterranean races as lazy because they do not share our enthusiasm for the machine.

It would be laboring a sufficiently obvious point to demonstrate in detail that the machine is imperialistic. Anything which is hungry for power and afraid to

³ "The Education of Henry Adams." Boston, 1918. p. 445.

stop must be imperialistic. Its life depends upon this attitude, or so it thinks. It is the nature of anything imperialistic to impose its standards upon those who succumb to its influence, or who are inclined to succumb to its influence. Moreover those who are ignorant of its influence, or those whose fear inhibits recognition of that influence, are in the gravest danger of being enslaved through their own stupidity.

The European workingman knows this very well. A British observer has described the effect of this knowledge on the British workman to-day. "The stress and emphasis which ought to be laid on life itself is being placed with marvellous intensity of effort on the means to life, the production of wealth, and life in this one-sidedness of effort is in process of being forgotten. The enormous energy employed on the means leaves little surplus over for the end, and the problem of distribution, which is no less important than that of production, is left to be a mere result, almost a by-product, of production. The result of the process is the raising . . . of the technical expert to the standard of a human ideal. It has led also, by reaction, to the 'play for safety' mentality of modern life, the tendency to crowd into black-coated occupations manifested by all classes of society. The 'safe' professions, being at least superficially less mechanical, offer the appearance of a freer life than does the industrial world, and the individual feels that there, at

least, he will have time to breathe. To exhort men to 'live dangerously' is not sufficient to change this attitude, since the joy of living dangerously, which is always its attraction, belongs only to the few who control machines, not to the many who are controlled. The workman, as a result, turns his children into clerks, and the middle class tend to seek similar safe occupations. They are governed by forces which lie beyond their reach, and these forces are the forces which 'produce'. The stress which ought to be placed equally and harmoniously on action and repose, on work and play, has been displaced and the life of man put out of joint. This is surely wrong, even from the point of view of national prosperity, since, in the last resort, it is not the amount of trade which a nation does by which it can be judged—but the life it lives by means of it. There is an art of action as well as of repose, and they are not separate one from another. When they are together harmony is restored.”⁴

The machine imposes its standards wherever it has power enough to do so, and is ably seconded by the Puritan mentality. This mentality believes that it is in control of the machine, but in reality it is enslaved by the greed, hunger, and restlessness which the machine has induced. This generalization holds as true for communistic control as for big business

⁴ “The Gentleman Ideal.” By F. McEachran. *The Nineteenth Century and After*. December, 1928.

control,—in fact, wherever the ideal emphasis is laid upon the value of the machine.

Melchett and Stalin are traveling along converging roads, and it will be interesting to see whether one eats the other up or whether an ultimate partnership is arranged between them. I use these two names only as symbols to indicate the drift of my suggestion, although I note as I write these lines that the new Mond-Turner conference urges as one of its most important suggestions close coöperation between British and Russian trade.

The Fourth Internationale seems to be less obvious at present than the Third. Its headquarters are so much nearer home that even liberals suffer from astigmatism, and while it howls at Russia it conceals its work at home by distracting the public mind toward far-off places. There is more than one mandated Zion.

Brooks Adams remarked a few years ago: "To-day Great Britain and America, like the parts of some gigantic saurian which has been severed in a prehistoric contest, seem half unconsciously to be trying to unite in an economic organism, perhaps to be controlled by a syndicate of bankers who will direct the movements of the putative governments of this enormous aggregation of vested interests independent of the popular will."⁵ His brother reinforced this

⁵ "The Degradation of the Democratic Dogma." By Henry Adams. New York, 1919. p. 114.

observation many years earlier by remarking: "This capitalistic scheme of combining governments, like railways or furnaces, was in effect precisely the socialist scheme of Jaurès and Bebel."⁶

The world war has assisted this process to a degree which must have made Henry Adams turn in his grave, and if we ever witness a second struggle on a world-wide scale, it would seem that this struggle will be between the leaders of the Third and the Fourth Internationales for world power. I trust that we shall not live to see an Unholy Roman Empire rise out of the people's ruin.

The rationalization of the world, which is now going on so rapidly, is based upon uniformity. Its ideal is that all men throughout the world shall be alike and shall be workers in one great hive for the benefit of the machine. The most potent agent at present in making the imaginative life of the world dull and uniform is the American motion-picture industry. Its success is only possible in an industrial civilization, which encourages uniformity in every way for its own ends. As Edgar Mowrer remarks: "Where the producers' mentality is substantially one with the consumers', the industrial system can be developed almost without limit."⁷ The machine takes care that producer and consumer are identical.

⁶ "The Education of Henry Adams." p. 423.

⁷ *op. cit.* p. 132.

We have seen that both the machine and Puritan civilization flourish best in Northern countries. They despise Mediterranean peoples, except in so far as they are useful to their purposes. They have no use for "dagoes," yet our literature, art, civilization, and the most profound of our hereditary folkways come from the basin of the Mediterranean. All that has built up western civilization and held it together comes from Israel, Greece, Rome, and Mediæval Italy. Renaissance Italy has also contributed rather mixed ingredients, half stimulating and half decadent.

The American Puritan culture of the machine requires the abdication of our personalities and exalts the abdication into an ideal. As I have already pointed out, it substitutes the hive for the individual man of flesh, blood, heart, and intelligence. Brooks Adams, who came of old Puritan stock, was honest enough to make the following confession. "In my early middle life I fell into difficulties which only good fortune prevented from turning out . . . tragically for me. . . . In this crisis of my fate I learned, as a lawyer and a student of history and of economics, to look on man, in the light of the evidence of unnumbered centuries, as a pure automaton, who is moved along the paths of least resistance by forces over which he has no control. In short, I reverted to the pure Calvinistic philosophy."⁸ Nothing worse could have happened

⁸ "The Degradation of the Democratic Dogma." pp. vii-viii.

to Brooks Adams than to lose his money and the prestige of belonging actively to a ruling family, yet the fear in his Puritan blood led him, as it ultimately leads nearly all Puritans to-day, to a purely mechanistic philosophy. Does this illustration make more clear to you the connection which exists between predestination and the machine?

Bolshevik Russia, which has caught the Puritan disease, hopes to substitute the hive for the individual man of flesh and blood in the same manner. Over thirty years ago Henry Adams wrote to his brother Brooks: "My conclusion . . . is . . . that our so-called civilization has shown its movement, even at the centre, arrested. It has failed to concentrate further. Its next effort may succeed, but it is more likely to be one of disintegration, with Russia for the eccentric on one side and America on the other."⁹ The "next effort" was, of course, the world war which broke out in 1914.

The imperialism of the machine, like that of an army, conscripts us to its own ends, and it desires these ends to remain secret as long as possible. These ends are to reduce us to fluid consciousness and to use that fluid consciousness for the purpose of feeding its hunger for power without embarrassing protests from us. To quote Brooks Adams again: "Democracy is an infinite mass of conflicting minds and of con-

⁹ *Ibid.* p. 98.

flicting interests which, by the persistent action of such a solvent as the modern or competitive industrial system, becomes resolved into what is, in substance, a vapor, which loses in collective intellectual energy in proportion to the perfection of its expansion."¹⁰

To-day we may observe the process by which the intellectual energy of the American people is becoming resolved into an ever more perfectly expanded gas. The infinite complexity of conflict in American democracy is equally visible. Unity is order. Infinite complexity, as soon as it reaches the point at which we can no longer understand it, is chaos. Is America, at the present moment, tending toward order or toward chaos?

Walter Meakin recently asked: "Has man created in modern industry a machine which is growing so complicated that it is passing beyond his powers of comprehension and control?"¹¹ The answer is so obvious that the question seems rhetorical. "Erewhon" has a more profound meaning than even Samuel Butler suspected. Speaking of machines, he remarked in this novel: "Some people may say that man's moral influence will suffice to rule them; but I cannot think it will ever be safe to repose much trust in the moral

¹⁰ *Ibid.* p. 109.

¹¹ "Man and the Industrial Machine." By Walter Meakin. *The Daily News* (London). February 19, 1927.

sense of any machine. Again, might not the glory of the machines consist in their being without this same boasted gift of language?"¹² Did the machine teach Calvin Coolidge to be silent, and did it teach us to admire the profundity of his silence?

Samuel Butler also remarked: "From a low materialistic point of view, it would seem that those thrive best who use machinery wherever its use is possible with profit; but this is the art of the machines—they serve that they may rule. They bear no malice towards man for destroying a whole race of them provided he creates a better instead; on the contrary, they reward him liberally for having hastened their development."¹³

The machine tends to be superman, and its personal philosophy is that of Nietzsche's Zarathustra, although it lacks the spiritual qualities which may be held to justify Zarathustra in some measure. It cannot be superman of itself, but it may achieve supermanhood by incarnation in humanity through a mechanistic hive structure. The machine has nearly reduced the American mind to inertia already. Now inertia is a property of matter by virtue of which matter tends to remain at rest, or to move only in a straight line whenever it is set in motion. Nothing is more deterministic than a straight line, and there can be no

¹² "Erewhon." By Samuel Butler. London, 1919. p. 243.

¹³ *Ibid.* p. 247.

narrower groove than a straight line. The American mind, set in motion by the machine, is now moving fatalistically in a straight line, that is to say, in the narrowest possible groove. It believes that it is governed by predestination, and so the American course of empire takes its way.

Such a mechanistic hive structure as the machine tends to organize may be superman only in the sense that it can be infinitely more powerful than any human member of its structure. If the point is ever reached, however, when every human being is conscripted into its ranks, such a limitation of its supermanhood as this implies would be regarded by the human race as an academic point and would be laughed at as we have been known to laugh over the old scholastic disputation about how many angels could dance upon the point of a needle. A good many fallen angels dance upon the point of a gramophone needle now.

The number of inconclusive and futile spirits who hover around a wireless apparatus are extraordinary. Aldous Huxley had occasion to ponder over this curious fact on his voyage from Japan to America. "It was the first morning out of Yokohama. Coming out of my cabin, I was handed the day's bulletin of wireless news. I unfolded the typewritten sheet and read: 'Mrs. X, of Los Angeles, girl wife of Dr. X, aged 79, has been arrested for driving her automobile

along the railroad track, whistling like a locomotive.' This piece of information had been transmitted through the ethereal holes between the molecules of air. From a broadcasting station more than five thousand miles away it had come to our ship in rather less time than it would have taken the sound of my voice to travel from one end of the promenade deck to the other. The labors of half a dozen men of genius, of hundreds of patient and talented investigators, had gone to creating and perfecting the means for achieving this miracle. To what end? That the exploits of young Mrs. X, of Los Angeles, might be instantaneously known to every traveler on all the oceans of the globe. The ether reverberated with the name of Mrs. X. The wave that bore it broke against the moon and the planets, and rippled on towards the stars and the ultimate void. Faraday and Clerk Maxwell had not lived in vain."¹⁴

I am waiting for the day when a new sect is founded in Los Angeles whose members will gather in a new synthetic Gothic cathedral with a broadcasting transmitter installed among the artificial flowers on the altar. The High Priest of this sect will address the prayers of the congregation into this instrument in order to make quite sure that they reach the ears of the Almighty. Machinery could hardly be asked to do more.

¹⁴ "Jesting Pilate." By Aldous Huxley. London, 1926. pp. 252-253.

At any rate the radio is powerfully assisting the machine by suggesting to us all that we are flickering atoms in a larger impersonal structure. Atom calls to atom and is heard. We are all interested in Mrs. X. and millions like her, but we think of Mrs. X. as impersonally as if she were a cipher, and we forget about her immediately. So many unrelated little sensations of this sort bombard our consciousness that other human beings tend more and more to become negligible little interruptions in our life.

This new impersonality is an abdication of intelligence and a confession of failure. Henry Adams used to amuse himself at dinner parties by asking the liveliest woman at the table why the American woman was a failure. He tells us that she was sure to answer that it was because the American man was a failure, and that she meant it.¹⁵ I am inclined to corroborate this observation of Henry Adams every time I see an American woman tourist bullying her husband and contemptuously rushing him through European art galleries while she loudly complains of his shocking lack of culture. As her husband has become an atomic man, the machine permits him the compensation of power fantasies. These power fantasies are sometimes capitalistic and sometimes socialistic. I have met more than one socialist millionaire.

¹⁵ "The Education of Henry Adams." p. 442.

CHAPTER EIGHT

THE machine, in order to reduce humanity to the point of subservience necessary for it to assert its supposed supermanhood successfully, finds it convenient to begin with a country which has the oldest and most deeply rooted industrial tradition, and in which any other tradition is either young and weak, moribund, dead, or non-existent. That country, needless to say, is the United States of America. Garett Garrett best sums up the machine mentality whose supermanhood is in question: "Each part of a machine is for what it is for. Each machine in the great scheme of machines is for what it is for. We make machines with organs and chemistries to simulate creature reactions to stimuli. All of them feel. Some of them see. There are now some to think mathematically, these substituting in drudgery for the mind as others substitute for the body. But how stupid it would be to expect them to think politically or philosophically."¹

So far as I can perceive, apart from the ordinary powerful means of social pressure and the sheer conscription of labor which industrialism now compels,

¹ "Machine People."

the machine has discovered ten influential media to assist it in its purpose.

1. The standardized motion-picture.
2. The standardized radio.
3. The standardized newspaper and magazine with their standardized advertising.
4. The standardized automobile.
5. The standardized theater.
6. The standardized corporation.
7. The crossword puzzle and its cousins.
8. Philosophy in its descent through pragmatism to behaviorism, applied psychology, and the "science of advertising." The last revels in "conditioned reflexes."
9. Welfare work and all forms of organized charity.
10. The standardized American short story.

The manner in which the cinema, the radio, the newspaper, the automobile, the theater, the corporation, the crossword puzzle, and American welfare work contribute to the necessary leveling down of mind and soul into moron-like conformity is transparently obvious. The relationship between pragmatism and the workaday philosophy of big business is clear enough to be thought out by any reader, although it never appears to have occurred to the mind of William James. The relationship between be-

haviorism and the machine appears to be that of effect from cause, as Bertrand Russell, otherwise extremely respectful to behaviorism, has cleverly pointed out.

Bergson has obscured the idea of space and merged it into that of time in a manner most pleasing to the machine, though his philosophy is born of an effort toward romantic escape from the machine. His good work has won him the Nobel Prize founded by that genial old friend of machinery who dealt in explosive chemicals, Alfred Nobel. The Bergsons of the future will win far more substantial prizes in industrial laboratories owned and operated by the chemical trusts which pursue so well the good work initiated by Nobel.

Einstein's theory of relativity as popularized for the multitude has also contributed to the demolition of space values, and Freud has broken down the sense of personal responsibility to a point at which industrialism can step in and assure man that he had best depute his responsibility entirely into the safe hands of the kindly machine. An analysis of *Gestalt* from this point of view would produce interesting conclusions, and Pavlov's attempts to analyze that extraordinary "electrical accumulator" known as Lenin's brain suggest that a mechanistic study of the dead brain in cross-section is believed to be more useful from a pragmatic point of view than an observation of the live human being in his relationship to his fellows.

I shall leave the details of this general philosophical analysis in the far more capable hands of Wyndham Lewis.² The drift of the whole process has been summed up briefly by Graham Wallas in his comment on Taylorism. "Mr. F. W. Taylor assumes that men can be found to handle pig-iron, each of whom 'more nearly resembles in his mental make-up the ox than any other type.'³ But the Chinese experiment of building the Great Wall by the labor of six hundred thousand prisoners, who had been surgically reduced to the condition of oxen, has not been repeated."⁴

Nevertheless, I seem to have heard rumors among American intellectuals that scientists and engineers are clamoring already for the sterilization of the unfit. Those who are most unfit to adapt themselves to a machine civilization are the nation's artists, and I daresay that before long there will be an agitation for the sterilization of artists. Every attempt to sterilize their minds has been made already with tolerably successful results.

All these efforts are demanded, we are told, by the tyranny of facts. To which John Cournos replies: "Frankly, I do not see that the tyranny of facts is preferable to any other tyranny. . . . Facts themselves are unreliable and subject to change; but my

² See "Time and Western Man." London, 1927, as well as "The Enemy," a periodical edited and largely written by Mr. Lewis.

³ "The Principles of Scientific Management." p. 59.

⁴ "The Great Society." By Graham Wallas. New York, 1914. p. 339.

virtue, my ideal, my desire, may be eternal and absolute. Here my inexhaustible wealth lies.”⁵

Of course, I entirely deny the facts and therefore deny their tyranny. We are really suffering from tyranny by suggestion. As I. A. Richards remarks: “All through contemporary Western civilization a change is occurring, slowly in Europe, more rapidly in America, which may be described as the substitution of suggestion for tradition.”⁶

This is the real key to the riddle. I believe that the most important question we can ask ourselves at the present moment is this: *Is not suggestion being consciously used for a definite end by a few men united in a common conspiracy to influence thought, conduct, and action throughout the world in order that it may respond to the unified purpose of these few men?* A man like C. K. Ogden, who has an encyclopedic range of knowledge, great powers of observation, and wide contact with currents of doctrine in most countries of the world, is peculiarly well situated and equipped for studying this problem, and I believe that he would do a great public service if he pursued any observations he may have made along these lines to their final conclusion and reported upon them fully to the public.

⁵ “Will Culture Survive?” By John Cournoos. *Yale Review*. January, 1928.

⁶ “The Changing American Mind.” By I. A. Richards. *Harper's Magazine*, January, 1927.

Meanwhile I. A. Richards has made certain other comments of interest in his thoughtful article entitled "The Changing American Mind." He says, ironically enough: "It is a most hopeful sign that the publicity expert has such power over here, for some powerful influence is required to keep fluid people together." And he adds: "It is no accident that Psychology is 'that American subject' as they call it at Oxford." He is, of course, really alluding to applied psychology.

The most popular courses in American universities at present are courses in applied psychology. Every student, who is anxious to succeed in business, studies applied psychology. Every student who looks forward to an advertising career does the same. He learns that red is the color which most quickly attracts the eye. Armed with this piece of information, he rushes home and tells his father who owns a nation-wide chain of cigar stores. These cigar stores promptly bloom forth next month in the most arresting shade of vermilion.

America is rapidly turning into a vast psychological laboratory in which a minority of experimentalists vivisects the majority. Psychoanalysis in America is a laboratory for studying the defective minority. Behaviorism is a laboratory designed to experiment upon the elementary and undifferentiated majority. Civilization in America is rapidly becoming a laboratory designed to experiment upon the standardization of

the complex totality. Its ambition appears to be to render this totality as simple and foolish as possible.

The American mind has been rendered so simple already by the machine that an American philosopher, John B. Watson, who is vice-president of an advertising agency, can already see the possibilities of controlling the elements of that mind. At least, such is his claim. If he is correct in his assumption, the determinism desired by the machine is now almost completely established. I fear, however, that his claim requires stronger substantiation than he is yet able to offer us.

Let us examine some of the applications of Mr. Watson's claim. He has already published several books in which he describes the theories which he has based upon the Russian scientist Pavlov's physiological investigations. Some of these books are addressed more particularly to scientists, but "The Ways of Behaviorism"⁷ is intended as a popular presentation of his theory to the general reader. I shall base my comments on this book, as well as on an article which he contributed recently to an American magazine of large circulation.

Mr. Watson states that the real goal of behaviorism "is to provide the basis for the prediction and control of human beings."⁸ He defines behaviorism, vaguely enough, as "the scientific study of human behavior."

⁷ New York, 1928.

⁸ p. 2.

After claiming for it the distinction of novelty, he adds complaisantly: "Now the newspapers are beginning to feed it to the masses, but still in broken doses."⁹ He evidently looks forward to the day on which the newspapers will feed it to the masses as regular food. As vice-president of an advertising agency, Mr. Watson ought to know a great deal about newspapers.

Not only does he claim that behaviorism is a new form of psychology, but he is certain that it is a new science. He has great faith in its future. "We hope," says he, "to reach such proficiency in our science that we can *build*¹⁰ any man, starting at birth, into any kind of social or a-social being upon order. . . . The difficulty of working with the adult on a behavioristic basis is probably the reason the behaviorist has pursued his studies upon infants and young children so assiduously. Conditions are simpler there."¹¹

Mr. Watson seems to admit that he finds even American adults too complicated to grasp. For his purpose it is necessary to catch Americans young, while they are simple enough to respond innocently. You will note the fact that he hopes to *build* them rather than shape them. "Build" is the instinctive word which the machine has taught him. He repeats it elsewhere. "Men are built, not born."¹²

⁹ p. 5.

¹⁰ Italics mine.

¹¹ p. 20.

¹² p. 37.

Clinging fast to this simple idea, he remarks elsewhere: "We can teach him [the American infant] to be an orator without knowing how to think—or a thinker without knowing how to orate. If all of these things are not under the control of society, then the behaviorist has made an awful havoc of his life's work."¹³ Disregarding the peculiarities of Mr. Watson's style, it will be pertinent for us to ask him what he means by society.

Are the orator and the thinker whom he hopes to build to be the typical members of this society? If the orator does not know how to think and the thinker does not know how to "orate," it would seem that both will not only be unable to control the society of which they form a part, but that they will not even be able to control themselves. Are they to be controlled by Mr. Watson, or by an oligarchy of behaviorists, or—the curious suspicion keeps creeping into my mind—are they to be controlled by the machine acting through the instrumentality of a few business and financial leaders who have studied behaviorism? In the last case, are these business and financial leaders to be exempt from the behaviorist's thoughtful educational attentions or not? If they are not, will not the behaviorist have made an awful havoc of his life's work?

¹³ "What About your Child?" By John B. Watson. *Hearst's International-Cosmopolitan*. October, 1928.

Mr. Watson confesses that he still has a great deal to learn. "To control the individual—have him behave as society specifies—by confronting him with appropriate stimuli, we must have considerable knowledge not only about native, fundamental stimuli, but also about those which have been *conditioned*. To gain this knowledge, we must go to the laboratory and study the human individual from infancy onward." ¹⁴

You will note in this paragraph that Mr. Watson defines controlling the individual as making him behave in the manner which society *specifies*. This confirms my suspicion that the word "society" is only a euphemism for the machine or the mechanistic structure. Machines, as every engineer will tell you, require specifications for their completion, while human beings demand education. I should define behaviorism as an experimental attempt to substitute mechanical specifications instead of humanizing education in bringing up children and in disciplining adults. If such is the case, behaviorism should prove even more valuable to the machine than pragmatism as a means of influencing and getting control over the American mind.

Mr. Watson would go further than this. He hopes to learn so much about human emotions that he will be able to control our emotional life as well. He will be able to make workmen docile and employers as

¹⁴ "The Ways of Behaviorism." p. 19.

impersonal as the machine itself if he only studies hard enough. As he ingenuously remarks: "We are not the creatures of reason we think we are. Even the most austere are, on the contrary, creatures of steel-riveted emotional systems." ¹⁵

I have already pointed out to what extent Americans are creatures of fear. Mr. Watson appears to agree with me, for he asks rhetorically: "Who has set up a school for teaching us to be afraid and not afraid?" ¹⁶ This suggests that a dangerous thought may soon begin to stir in the behaviorists' minds, if it has not stirred already. I should be disposed to welcome a school for teaching us to be unafraid, but I cannot help wondering why Mr. Watson plays with the idea of setting up a school for teaching us to be afraid. Surely it is not in his mind that it would be well to train from childhood the slaves of the machine in conditioned fear reflexes. This would be pleasing to the machine, but a dubious benefit to the human race.

At any rate, the thought is clearly present in his mind that it would be as well to make the child as unsocial as possible, for he makes the amazing statement that "the time must come when it will be just as bad manners in the home to . . . show affection to mother, father, or other members of the family, as to come to the table with unwashed hands." ¹⁷ This unsocial teaching is unlikely to prove a good training

¹⁵ *Ibid.* p. 49.

¹⁶ p. 48.

¹⁷ p. 62.

for courtship, marriage and parenthood. It is worth while remembering that Athens hated Sparta.

From the point of view of the machine, it is necessary that the imaginative life should be killed. Mr. Watson appears to agree with the machine. "The new things in the universe come from the doers—the chemist, the physicist, the engineer, the biologist, the business man. With them doing leads to thinking, and thinking in turn leads to doing. With the poet, the philosopher, the day dreamer, thinking leads not to doing but *merely to other words* either spoken or thought: the endless chain of words is never broken." ¹⁸

Are new things so much more valuable than old things, and are we to assume, as his own logic would seem to indicate, that Mr. Watson would rather be a business man than a philosopher, an advertising man than a psychologist? I should hesitate to impute such a wish to a philosopher. At any rate, if what Mr. Watson has just said is true, America must be paradise, and a commercial traveler in soap the ideal creative artist. Judged by such a standard, Christ was so idle that the only thing He did was to die on the Cross. According to this ideal, a machine is more valuable than a man, because it does not waste so much time thinking.

It really seems as if Mr. Watson's mind was

¹⁸ p. 86.

governed by the machine. Bertrand Russell quotes him as saying: "In my opinion, one of the most important elements in the judging of personality, character, and ability, is the history of the individual's yearly achievements. . . . If the individual is a writer, we should want to draw a curve of the prices he gets for his stories year by year. If from our leading magazines he receives the same average price per word for his stories at 30 that he received at 24, the chances are he is a hack writer, and will never do anything but that." To which Bertrand Russell adds the mild rejoinder: "Applying this criterion to Buddha, Christ, and Mahomet, to Milton and Blake, we see that it involves an interesting readjustment in our estimates of the values of personalities."¹⁹

Mr. Watson's values appear to be money and conformity. Behaviorism is really the study of how a man can make money by making another man conform. The practical conclusions of this study are yet to be fully disclosed. So far Mr. Watson's results are based on the study of animals and children. We cannot study Mr. Watson by these methods as yet, for he is an adult.

The most constructive suggestion that he has yet been able to make toward rendering us all subserviently uniform is one whose import, I suspect, he has not yet realized. "The mere *disuse of a function*—

¹⁹ "Sceptical Essays." By Bertrand Russell. London, 1928. pp. 93-94.

any function—will normally bring about a loss in the speed and accuracy of that function.”²⁰ It would seem to be possible, by sufficiently limiting education and by providing innocuous mental substitutes, to paralyze the creative function in every imaginative form and to remove all creative stimuli from the mind. The creative function would then fall into disuse and render the stricken mind sufficiently subservient to be a perfectly functioning machine-tender.

This possibility is not so fantastic as you may suppose. At the annual meeting of the Association for the Advancement of Science held in New York in January, 1929, Dr. Alfred J. Lotka, supervisor of mathematical research for the Metropolitan Life Insurance Company, made the following remarks in the course of an address: “Each of us commands vicariously the genius of the Newtons, the Faradays, the Pasteurs who have gone before. . . . And modern large scale production has brought it about that a relatively few best minds are sufficient to keep the machinery of the modern community running, not only smoothly, but on the up grade. The trend is toward an ever increasing concentration of the world’s significant tasks in the hands and minds of a few. Why then should we take thought to improve

²⁰ “The Ways of Behaviorism.” p. 71.

the proportion of best minds in our midst? For there are even now barely enough tasks for them to do. . . .

"There is here a social problem whose insistence is likely to become increasingly felt as the century grows older. . . . Is the human race to become patterned after the model of the anthill or the beehive, with a large number of 'workers' of stunted mental growth, supporting and supported by a small aristocracy of best minds set aside for the creative function—creative, that is, in the spiritual sphere?"²¹

I leave you to ponder this question, while I wonder how a few minds can be successfully creative in the spiritual sphere if they spend all their time ruling a vast slave world.

The behaviorists speak as men with authority. In America, if you speak with sufficient self-assurance on a subject unfamiliar to the public, you may always pass as an expert, especially if what you say claims to be scientific. Mr. Watson is now preaching to the general public that we ought to give up the home, that we ought to give up art, that we ought to give up the creative use of our imaginations. The infection of his teaching is spreading widely, and behaviorism bids fair to become very soon as much of a popular craze as half-baked psychoanalysis.

Now Mr. Watson's deductions are based on the observation of animals and children. Without check-

²¹ Reported in *The Outlook and Independent*, January 16, 1929, p. 96.

ing up these observations at the moment, I think we may agree with Bertrand Russell who in an obvious allusion to the behaviorists and to the *gestalt* psychologists respectively, remarks: "One may say broadly that all the animals that have been carefully observed have behaved so as to confirm the philosophy in which the observer believed before his observations began. Nay more, they have all displayed the national characteristics of the observer. Animals studied by Americans rush about frantically, with an incredible display of hustle and pep, and at last achieve the desired result by chance. Animals observed by Germans sit still and think, and at last evolve the solution out of their inner consciousness." ²²

It would be interesting to read a book by a German behaviorist, who was a disciple of Mr. Watson, but who had never met him. Assuming that this German behaviorist had a laboratory of his own and that he reported the results of his behaviorist experiments in this laboratory, we should then be better able to verify the truth of Mr. Watson's theory about the omnipotence of environment. Or is science free of environment? If not, does Mr. Watson propose to try and make it free? If such is his hope, how does he propose to go about it?

Personally I consider behaviorism as the result of

²² "An Outline of Philosophy." By Bertrand Russell. London, 1927. pp. 32-33.

the environment in which Mr. Watson has been brought up. As Bertrand Russell puts it: "When we consider the conceptions of human excellence which dominate the most powerful sections of the most powerful countries, we are led to the conclusion that behaviorism merely supplies a theoretical justification for what is already believed. . . . I find that behaviorism does tend, however illogically, to have an ethic. . . . The argument seems to be: since the only thing we can do is to cause matter to move, we ought to move as much matter as possible; consequently art and thought are valuable only in so far as they stimulate the motions of matter." ²³

That is the philosophy of the machine in a nutshell, and Bertrand Russell recognizes that this philosophy and behaviorism are closely related to each other.

²³ "Sceptical Essays." pp. 90, 93.

CHAPTER NINE

ART and thought, we may take it, are now best represented in the popular mind by the average mass-production short story in a magazine of large circulation. Such a short story stimulates the motions of matter considerably. A great many trees are chopped down for wood-pulp; a great many machines pulp the wood of these trees; a great many more machines turn the wood-pulp of these trees into paper; a great many trains and motor-trucks rush this paper across America to the printer; a great many more machines print the story, fold the paper, bind it, address it, post it, and mail it; an army of machines makes goods, the demand for which is created by the advertising which makes the publication of the story possible; hundreds of thousands of trains, trucks, and automobiles carry the story all over the world, sort it, and deliver it to millions of readers; and a great many more machines reduce the paper on which the story is printed to pulp again from which to make more paper to print another story.

While all these feverish activities are going on, the story itself becomes less and less important, and a week after it has been printed everybody has for-

gotten all about it and it is no longer procurable. It is a perishable product. If you want a proof of this, apply to the publishers for a few back numbers of *The Saturday Evening Post*.

My most personal interest is in the influence of the American short story upon American life. I am fascinated when I study the manner in which it has been captured by the machine for its own purposes. Apparently the machine's first intention was merely to advertise its own products, but the point came at which it became clear to the machine that, in order to advertise its products with sufficient success and in a sufficiently rapid curve of profitable extension, it was necessary to create media of advertising which would make the American people desire sufficiently the objects advertised. As I have said before, only a standardized people will use standardized things exclusively.

The machine therefore set about creating the national magazine among other things, and the measure of its success needs no historical summary by me. The only factor which it really had to consider as a difficult obstacle in its forward path was the seemingly everlasting factor of human creativeness. It was imperative that the machine should discover the weak points in the creative human impulse and should exploit them for its own ends.

For the ordinary literary craftsman, (and after the turn of the century there were few American story-

writers who could lay claim to more than ordinary craftsmanship), the weak points were greed and discouragement. Most writers could be corrupted by money. All but a few of the others could be silenced by discouragement.

The few who remained unaffected by either of these methods were naturally those of the most creative power, those who approached most nearly to genius. Tainted as even the most disinterested American is by the restlessness and speed of industrial life, creative American storytellers have been disposed to choose and perhaps misunderstand certain elements in the teaching of the four chief literary personalities who have influenced the thoughts and emotions of the twentieth century.

The machine, which controlled the background and even the foreground of their lives, taught them to read into Ibsen the gospel of revolt against all human allegiances, including that of the family; to read into Tolstoy a revolt against art; to be possessed through Dostoevsky of profound fear and of a disposition, like Rasputin, to consider that men can be saved only by repentance from sins which it is therefore necessary for them to commit; to read into Nietzsche a special snobbish interpretation of the will-to-power which implied the spiritual value of utilizing personal and rather vague individual power over the herd man.

The machine also taught them to think of sex in

purely mechanistic terms. For the satisfaction of the sex instinct, men were regarded as interchangeable parts, and so were women. It was considered that the object of sex was to discharge energy. Birth control became a mechanical device. The sex act was even pictured as a mechanical function, and the current language of obscenity used machine images constantly. The modern heaven, in T. S. Eliot's sardonic phrase, was a "promise of pneumatic bliss."

Charles W. Wood has recently analyzed what has been happening to marriage in America in recent years. "What is happening to marriage?" he asks. "When man moved out of the family and began to live in the machine, matrimony began to lose its holiness. As the institution of the family went down and down, matrimony became less and less important. . . ! The first step in its downfall was the attempt to exalt the sex longings to first place in human affairs: that is, to make matrimony an affair of the heart instead of an institution for the subordination of individual instincts to the common good. . . .

"Of course it did not work. The story that 'they married and lived happily ever after' soon became a joke. . . . Then came the automobile and the war, and psychoanalysis and the knowledge of birth control. The automobile made it impossible to chaperon the youngsters any longer. The war destroyed their respect for the alleged wisdom of adults. Psycho-

*Robert D. Wood
"Mythology"*

analysis encouraged them to be curious as to matters which had aroused fear and trembling theretofore. The knowledge of birth control completed the revolution. It made virginity a problem to solve instead of a precious mystery to guard. . . .

"I do not know what the solution will be. I only know that it will not be solved until the machine has evolved to its logical destiny. For it is in the machine that man now lives and moves and has his being. It is to the machine, not to the husband, that woman must now look for the economic security of her offspring. The machine will not make anybody 'independent,' for independence is now seen to be a myth. But it will presently make us all interdependent, instead of dependent upon a husband or a father or a brave hunter or an individual money-getter. . . .

"Extreme self-discipline may be the outcome, although there is nothing to indicate at present that sexual chastity is necessary for the evolution of the machine. It was necessary for the evolution of the family, but possibly the machine will not care."¹ I think that this is a remarkable analysis of the situation to come from a man who is a contributing editor to America's most radical journal, *The New Masses*.

The essential machine attitude of the American intelligentsia is sufficiently indicated by an extract from

¹ "What is Happening to Marriage?" By Charles W. Wood. *The Nation*, (New York.) March 20, 1929.

a recent review by an American of D. H. Lawrence's novel, "Lady Chatterley's Lover." "Critics ask why Mr. Lawrence uses words that are those of the most secret episodes, and lingers over descriptions of the most secret parts of the body; admittedly the public will stand any amount of sly reference, of heated and heady descriptions of the voluptuous approach to love, but why this stark nakedness, these devastating descriptions of these two naïve and childish people, to a world seared and wearied by the Flaming Sword. Yet had Mr. Lawrence written them a book upon a motor-engine in which he *implied* in hyperbolic terms of poetic symbolism two metal units so constructed in relationship the one to the other that their contact released energy, we would have flung the book into the fire. What we want in a book on engines is clean-cut, unemotional descriptions of the actual parts concerned, the relationship, their intent, details of timing and the like. This Mr. Lawrence, with the ardor and the restraint of the perfect craftsman, has given us when dealing with the exquisite and intricate mechanism of sex." ²

The identification of sex and the machine could not well be more complete. It would seem that we have already arrived at the age of the machine-man and the machine-woman. Mr. Watson would complete the trinity with the machine-child.

² "A Sex Novel." By Frances Gregg. *The New Adelphi*. December, 1928.

CHAPTER TEN

WE have already seen the effect of American machine civilization upon the rank and file in the army of American short storywriters. It may be as well at this point to pause for a little while and examine the position in contemporary American life of the honest artist. There are two American storywriters to-day whose work is likely to be remembered a generation hence. They are Sherwood Anderson and Ernest Hemingway. Other writers may be remembered by a single story or by two or three stories, but Anderson and Hemingway have already produced a large body of work which appears to me likely to last out. They are as significant in the history of the American short story as Eugene O'Neill is significant in the history of the American drama or the late Charles S. Peirce in the history of American philosophy.

Paul Rosenfeld has told us something of Sherwood Anderson's early life. "He grew in a corn-shipping town of post-Civil-War Ohio; grew among people who had forgotten the beauty laboriously accumulated in Europe; grew ignorant of the fact that beauty made by human toil existed anywhere on the globe.

Around him, too, everything was quantity, not quality; everything urged to small, cold ambition. He lived the days lived by countless other smart little boys in this meager civilization; volunteered to fight Spain and typhoid in Cuba; spent the money gained in soldiering in acquiring a little education at a fresh-water college; worked in factories, in bicycle-foundries; set out, driven by the universal goad, to become a successful business man; did become a successful business man.

"During a period, Anderson seems to have acquiesced, to have gone the way of all mortified flesh, become a smart, competing business man, and lived as lonely as no one but a wounded lover can. . . . Toward his thirty-fifth year, he became sick of soul. He commenced to feel the state in which he was living was filthy. He began to perceive that his relations with men and with women, through his sunken state, were filthy. . . . Business began to become a bore. Business men, with their self-importance and gosling simplicity, began to become ludicrous. Suddenly, it appeared to him that Chicago, the mid-West, all America was empty. There were no people. The census reports proclaimed tens upon tens of millions of inhabitants. But there were no people living human lives. . . . No one felt, at all. . . . Sickness of soul took Anderson away from business. . . . At odd hours, after business, in railway trains, he began to

write. And, lo, in the process of writing, the old wound began to close. He commenced to touch people again. He commenced to enter into lives.”¹

Here we have the best example I know of an artist's creative reaction from the American industrial background. This reaction produced those two fine books of stories, “Winesburg, Ohio” and “The Triumph of the Egg.” Anderson has written many other books, and these books are the record of a drawn battle between a man and an oppressive environment. For many years Sherwood Anderson fought to preserve his integrity against the financial and social pressure of a business environment. Not long ago he retreated from city life and in a homesick mood purchased two country newspapers in Virginia. Now he is a business man again, though perhaps on a smaller scale.

Why did he buy these newspapers? Why does he operate them? Recently he has confessed his reasons. “I must have a job and I never have had another job that gave me half so much pleasure. A man has to work. He cannot be just a teller of old tales. He has to find somewhere a place into which he fits. The presses in the print shop are persistent things. They eat up thousands and thousands of sheets of paper. They keep demanding and demanding. . . . The paper has to be got ready. It certainly serves

¹ “Port of New York.” By Paul Rosenfeld. New York, 1924. pp. 178, 192-194.

to take your mind off yourself." And he also remarks: "Too often I do not have time to think of what I write. For convenience's sake I live directly over the shop. Sometimes the presses run in the night. They shake the building. I lie in bed and tremble sometimes."

Now this is a tragic confession. I believe that Sherwood Anderson was justified in returning to small-town business. America saw to it that he was too lonely to devote his life entirely to his art. American life also saw to it that he feared leisure. Sherwood Anderson is a poet, but he could not find other poets in America with whom to share his sensitive reflections. In fact, he remarks that "men and women in love are about the only poets we have." He is still lonely, but he finds companionship in the machines which make him tremble. In his loneliness he cannot believe that he is a great creative artist, and yet he is as richly endowed as Chekhov and Hardy. Listen to what he tells us: "There are rainy winter and fall nights when the editor walks about in the streets or in country roads, sick with disgust of his own life, that he is so ineffectual in life. Tears come to his eyes sometimes. It happened when he lived in cities just as it happens here, in this small town."² Sherwood Anderson's life is by no means ineffectual. He is one

² "I Will Not Sell My Papers." By Sherwood Anderson. *The Outlook and Independent*. December 5, 1928.

of the bravest men in America. He has not run away from American life, and he has never sought to picture it otherwise than as it appears to him.

What has been the effect of machinery upon Ernest Hemingway? Just as Sherwood Anderson has been preoccupied with seeing himself truly, Ernest Hemingway has been preoccupied with seeing his neighbors truly. He approached life with innocence of mind and innocence of eye and with a religious faith in life which was generous and rightly quixotic. During the war he joined the Italian army. He was a brave member of the *Arditi*. He was made an officer. He had never seen life before. He was to see it now. Some years ago on top of an Italian mountain he told me some of his war experiences. He went into the war a pious boy. Then he witnessed the spiritual destructiveness of machinery. Let him tell us one or two of the incidents he observed.

"While the bombardment was knocking the trench to pieces at Fossalta, he lay very flat and sweated and prayed oh jesus christ get me out of here. Dear jesus please get me out. Christ please please please christ. If you'll only keep me from getting killed I'll do anything you say. I believe in you and I'll tell everyone in the world that you are the only thing that matters. Please please dear jesus. The shelling moved further up the line. We went to work on the trench and in the morning the sun came up and the day was hot

and muggy and cheerful and quiet. The next night back at Mestre he did not tell the girl he went upstairs with at the Villa Rossa about Jesus. *And he never told anybody.*"³

Here is another experience which came to this innocent boy full of ardor and unharnessed American energy. "They shot the six cabinet ministers at half-past six in the morning against the wall of a hospital. There were pools of water in the courtyard. There were wet dead leaves on the paving of the courtyard. It rained hard. All the shutters of the hospital were nailed shut. One of the ministers was sick with typhoid. Two soldiers carried him downstairs and out into the rain. They tried to hold him up against the wall but he sat down in a puddle of water. The other five stood very quietly against the wall. Finally the officer told the soldiers it was no good trying to make him stand up. When they fired the first volley he was sitting down in the water with his head on his knees."⁴

Ernest Hemingway has more sensitive perception of human suffering than any other American artist. He is unable to perceive the purpose of this suffering. He has lost his religious faith. He conceals the tenderness of his heart by an attitude of bravado. He would have us believe that he is "hard-boiled." This is a very

³ "In Our Time." By Ernest Hemingway. Paris, 1924. Chapter 8. Italics mine.

⁴ *Ibid.* Chapter 6.

common and beautiful attitude in American youth since the war. In Hemingway it is reinforced by a reflected vision which has preserved its faith in human nature while never shirking the implications of what it sees. His literary life is also a battle which calls for much heroism. In an earlier age he would have made a fine fighting monk, for his ideal is an ideal of clean conflict. This ideal is implicit. By way of contrast to it, he portrays with disinterested ruthlessness how men and women whom he loves fail to perceive this ideal and to govern their lives by it. If you want to see what Ernest Hemingway is really like, read "Banal Story."⁵

Now the machine has robbed our two finest story-writers of a religious faith, a general philosophy, and a principle of unity. They are striving to recapture these, and their struggle is heroic. If our two best men are moved so deeply by a sense of loss, what are we to think of all the other people in America who perceive this loss more dimly, and who wander helplessly to and fro seeking for a spiritual life which has almost vanished from their ken?

⁵ "Men Without Women." By Ernest Hemingway. New York, 1927.

CHAPTER ELEVEN

THE machine is teaching America to think of religion in more and more mechanistic terms. Religion, like business, has become a form of "Service." There is a clearly marked tendency to organize it on a business basis, and it is notably bound up with a standardized type of welfare work as well as with Americanization. It is elaborately endowed by big business; church management tends to become more and more a matter of business administration on a large and intricate scale resembling that of the corporation; dogma and other principles of structure and cohesion tend to disappear, leaving a vague code of social ethics in their place; and the path to success in the ministry requires complete subservience to big business.

Business "drives" are organized by most of the Protestant churches, and their foreign missions are supported generously by American imperialists in the belief that trade more readily follows the flag when the flag is first carried by the American missionary. This is particularly noticeable in China.

The Roman Catholic church, so far as the rank and file of its clergy are concerned, shows in a less degree the same business influence. Big business has very little

direct influence upon it, but pastors are appointed largely because of their ability to conjure with bricks and mortar. Furthermore, the joyless Puritanism of America has to some degree infected the American Catholic spirit.

Orthodox Judaism has been rapidly losing a large proportion of its American membership, and its lost sheep slowly broaden down from Reformed Judaism through Ethical Culture and other movements to an undogmatic paganism with no perceptible principle of spiritual cohesion other than an anarchic sexual release of "suppressed desires."

These changes in the American spiritual and mental fabric are most pleasing to the machine. If all personal human allegiances can be severed, allegiance is likely to be transferred more readily from the individual to the hive, and so by extension to the machine, as we see in Russia to-day. If art can be discounted on any grounds, spaciousness and therefore creativeness will tend to disappear in man. In other words, all the sources of our inner power will tend to be cut off by an unseen hand.

If man ever becomes possessed of fear on a large scale, the machine will chuckle, for universal fear leads to a belief in determinism, and determinism leads to slavery and spiritual death. As an English philosopher has remarked, "No doctor ever preached determinism to a patient in danger of demoraliza-

tion.”¹ Yet determinism is being preached by several self-constituted doctors to the world to-day.

In Europe, this determinism is almost identical with defeatism, and European defeatism is infecting the minds of many influential American intellectuals. The defeatism of Spengler has already captured the imagination of the world. Hundreds of thousands of copies of his books have been sold in Germany, he has profoundly influenced the mind of England and America, and his chief work has been translated into Italian by Mussolini himself. With an encyclopedic range of allusion, he has constructed a Calvinistic system which predicts that the future of the world will be in the hands of the engineer and the machine.

Spengler's law of cycles in human culture appears to be directly borrowed without acknowledgement from Sir Flinders Petrie,² although his cyclic table of cultures does not correspond very closely with Petrie's equally precise table. His application of the second law of thermodynamics to a time series is borrowed from Henry Adams without acknowledgement and his idea of the Faustian man is taken from Goethe. As it is an idea of Henry Adams which has specially

¹ "Notes on Mechanism. III." By R. M. *The New Age*. September 1, 1927.

² The suggestion may have come to Petrie from either Vico or Peirce who vaguely forestall Petrie's view. Peirce obviously influenced Brooks and Henry Adams. See "The Revolutions of Civilization" by Sir Flinders Petrie, London, 1922, and "Chance, Love and Logic" by Charles S. Peirce, London, 1923, pp. 295-296.

influenced the contemporary mind toward Spengler's form of defeatism, it may be well to point out the mathematical fallacy involved in this idea.

It was the belief of Henry Adams that civilization would degenerate rapidly as the volume of mechanical energy was released in a ratio corresponding to the law of inverse squares. Supposing that a certain amount of mechanical energy was released during the four hundred years between 1500 and 1900, for example, the same amount of mechanical energy was certain to be released during the twenty years from 1900 to 1920, and civilization would race toward disaster correspondingly faster during those twenty years than it had done in the previous four hundred years. Henry Adams reinforced his statement of this belief with a wealth of historical observation and philosophical reasoning which seemed to be largely confirmed by the observable facts.

Unfortunately it never occurred to him that, although twenty is the square root of four hundred, twenty years is not the square root of four hundred years. Time itself jumps in as a third dimension if we attempt such a calculation. Moreover this third dimension is concrete, while the two dimensions of the square of 20 are entirely abstract. This fact is readily proven. In four hundred years there are 4800 months. The square root of 4800 is a little over 69. Now 69 months make five years and nine months,

and not twenty years. It is extraordinary that this fallacy has never been pointed out before.

We have seen that the machine wishes all personal human allegiances to be severed, that it desires art to be discounted on all grounds, and that it wishes man to become possessed of fear. It also wishes sin to be given a positive value, as thereby man's sense of responsibility will be lost. It encourages the cultivation of will-to-power over humanity, realizing that those who develop this will-to-power are likely either to become leaders of big business or to go mad through frustration. In either case, the spiritual element in them will be paralyzed.

As a Swiss writer recently remarked, "Our contemporaries, like the automatists in all past ages, wish to confer the gift of life upon inanimate things. But when man thus believes that he is a sorcerer, is he not in danger of forgetting that in this world he is only an apprentice?"³ I need not recall to you the old legend of the sorcerer's apprentice.

The cultivation of the will-to-power over men is likely to lead those who cultivate it to scan the horizon for the strongest power within their field of vision. As things have gone so far, that strongest power has always appeared to be the machine. Little by little we may presume that the question will arise

³ "La Spiritualité de la mécanique." Par P. C. *Journal de Genève*. November 27, 1928.

in the minds of American leaders: *Is the machine the new superman?* It has already been preached in America that the Son of God was a model business man. May not the day soon come when the dread question is asked: *Is not the machine GOD?*

Signs are not wanting that a belief in the immortality of the machine already exists. W. F. Watson says: "It was recently announced in the Press that the metallurgists had produced a steel that is practically everlasting—by all accounts it simply won't wear out."⁴ We all know that steel is the flesh of the machine.

If the machine is to be worshipped as a god, it must undertake to produce and maintain order and harmony in the world which worships it, but as an English observer remarks, "There is no known occasion where order proceeds out of disorder mechanically."⁵

Many years ago Henry Adams, who was a Puritan, stated that the modern world would soon have to choose between the Virgin and the dynamo. As early as 1900, he thought that the dynamo was beginning to show signs of a godlike nature. He first examined a dynamo closely at the Paris Exposition in that year. Here is his comment.

⁴ "The Omnipotent Machine!" By W. F. Watson. *Cornhill Magazine*. November, 1928.

⁵ "Notes on Mechanism. III." By R. M. *The New Age*. September 1, 1927.

"To Adams the dynamo became a symbol of infinity. As he grew accustomed to the great gallery of machines, he began to feel the forty-foot dynamos as a moral force, much as the early Christians felt the Cross. The planet itself seemed less impressive, in its old-fashioned, deliberate, annual or daily revolution, than this huge wheel, revolving within arm's-length at some vertiginous speed, and barely murmuring—scarcely humming an audible warning to stand a hair's breadth further for respect of power—while it would not wake the baby lying close against its frame. Before the end, one began to pray to it; inherited instinct taught the natural expression of man before silent and infinite force. Among the thousand symbols of ultimate energy, the dynamo was not so human as some, but it was the most expressive."⁶

Now Henry Adams was a man of his time and race in his inclination to worship energy. Energy is demonic, while peace and the ultimate stillness are divine. Even the greatest artists of the nineteenth and twentieth centuries have been more disposed to worship energy than to worship peace. Where the best men are Manichees, it is not surprising to find that Henry Adams had his temptations. Inclined as he was to overestimate the power of the dynamo, he had no illusions as to the nature of those who professed to control the dynamo.

⁶ "The Education of Henry Adams," p. 380.

"The work of domestic progress is done by masses of mechanical power—steam, electric, furnace, or other—which have to be controlled by a score or two of individuals who have shown capacity to manage it. The work of internal government has become the task of controlling these men, who are socially as remote as heathen gods, alone worth knowing, but never known, and who could tell nothing of political value if one skinned them alive. Most of them have nothing to tell, but are forces as dumb as their dynamos, absorbed in the development or economy of power. They are trustees for the public, and whenever society assumes the property, it must confer on them that title; but the power will remain as before, whoever manages it, and will then control society without appeal, as it controls the stokers and pit-men. Modern politics is, at bottom, a struggle not of men but of forces. The men become every year more and more creatures of force, massed about central powerhouses. The conflict is no longer between the men, but between the motors that drive the men, and the men tend to succumb to their own motive forces." ⁷

In the light of these observations of Henry Adams, made many years ago, it may be worth your while to study the implications of such recent events as the Mond-Turner conference in England and the so-

⁷ *Ibid.* pp. 421-422.

cialization of machinery in Russia. Each points toward the possible achievement of well-nigh unlimited power concentrated in one or several individuals. Henry Adams, who had unrivaled opportunities for studying Theodore Roosevelt, and who admired Roosevelt's honesty and directness, perceived that Roosevelt as President of the United States was in a position of almost unlimited power. He used this power honestly and even fought valiantly against the machine, but Henry Adams confesses that Roosevelt in the first year of his presidency "showed chronic excitement that made a friend tremble." The power of Roosevelt was unlimited, but his mind, like every other human mind, was limited.

To Adams, control of the machine appeared to be the equivalent of control of the infinite, and it seemed to him that Roosevelt's partially successful battle against the machine had strained to the limit his power of self-control. As Adams puts it, "the power of self-control must have limit somewhere in face of the control of the infinite."⁸ The machine, unfortunately, permits no such limit in its masters.

⁸ *Ibid.* p. 418.

CHAPTER TWELVE

SPECULATIONS as to the divine or demiurgic nature of the machine have already arisen in the minds of a few Europeans scattered in different countries. It is to be presumed that these people, who are not specially in contact with one another, have responded to something which is in the air. Old Europe lies between young America and infant industrial Russia, and it is in considerable danger of being crushed by the machines on both sides with friendly, if not altogether wholehearted, assistance from Germany, Northern England, Belgium, and Northern France.

The men in Europe who have asked these questions, and who believe that they are slowly becoming aware of the most pressing and immediate problem of the future, hear and utter many complaints about the rapid Americanization of European culture. It is clear to me that the chief Americanizing influences upon European culture are the motion-picture, the radio, jazz, and the American short story, all of which spread the gospel of mechanism. Taylorism, rationalization, and American finance only follow where that gospel has been spread already.

If you analyze the influence of the American short

story in the light of the thirty qualities which I have endeavored to demonstrate that it possesses, you can readily apply your analysis to the motion-picture and to the radio, as well as to the Americanized British newspaper, the European system of trusts, and many other things. As soon as your mind is made up as to whether my diagnosis is correct, it behooves you to formulate your own attitude in the matter and your own policy as a human being toward machinery in this mechanistic age. This policy need not fundamentally alter your personal attitude as a conservative, a liberal, or a radical, except in so far as it clarifies it and inclines you to purge your philosophy of all mechanistic elements.

You are to decide whether you wish to live your life as a human being or as a machine. You cannot divide your life between the two. To use the jargon of chemistry, mixing human nature and machinery together will never produce a "chemical compound." It may produce a "mechanical mixture," if you indulge yourself in this manner on a sufficiently small scale. It will undoubtedly blow us up as a nation, and perhaps also physically as human beings through warfare, if we dedicate ourselves entirely to the machine.

In my view, the only possible security for a man, the only way in which he can save his soul, (if the phrase is not too old-fashioned), is to refuse allegiance to the machine absolutely and to demand allegiance

from the machine so far as he permits it to come into personal contact with him. This must be done with the clear knowledge of one's reasons for doing so and the clear realization of what possible consequences may ensue from one's action. One must also make every possible effort of adaptation to life through intelligence, self-sacrifice, and labor, in order to survive as a free man possessing his own soul.

Until one is a free man possessing his own soul, the path is not free to advance even a single step in the use of the right will-to-power which is truly creative and which calls for continual self-sacrifice. Nietzsche knew this perfectly well, although his disciples usually forget it. One must refuse this determinism of the machine through a madness of the heart, even against everything that the intellect may tell us, if we are going to transcend man and really create superman.

This refusal of the machine's determinism must be made quietly, cheerfully, and irrevocably. It implies a spiritual warfare designed, not to kill and maim man, but to kill and maim the demonic pride and lust of power which the machine engenders in all classes of the community. It may imply for a time killing and maiming the machines until we gain spiritual control of them and of ourselves.

Such a warfare will never be achieved by an artist or a statesman through propaganda. If he will refuse machines and what machines provide, except in so

far as he finds that they do not encourage his greed and that they save him spiritual waste, and if he will express only what his creative impulse wishes him to express, keeping that expression disinterested and free from mechanistic elements and from neuroses caused by the machine, he will find that this takes him all his time, but that he is on the right path. If he is a storywriter, he must regard the thirty qualities of the American short story as vices and not virtues. If he is only fitted to express these thirty qualities, or some of them, he will do better creative work cleaning out sewers than writing short stories.

Nor will he be fighting his battle rightly if he resorts to romantic escape, particularly if he climbs into an ivory tower. Romantic escape from the machine implies fear of the machine, and this fear is in itself a profound acknowledgment of unwilling allegiance. Such a fear is contagious and corrupts the young. The American writer must give over that minute self-analysis which any psychologist will tell him is one of the most subtle and profound forms of romantic escape. His job is not to analyze his personality, to pull it apart,—but to create and to develop it. The artist can only create with materials which he reverences, and his art is conditioned entirely by his reverence and recognition of personality,—first of all, his own personality, and then the personalities of his individual neighbors. That developed recognition of

personality by all American artists and writers would result in the new discovery of America.

Europe begins to suspect that the future of the world lies in the right use of American human energy. At present the machine uses our energy. It is high time that we began to use it ourselves. If we can do that quite simply and modestly and without Messianic complexes, and if we are disinterested and lacking in self-consciousness, we shall probably discover America for the first time and so lead Europe to the same discovery. It is also high time that we discovered Europe. If Europe and America do not discover each other soon, we are perilously near our end.

To regard the machine as destiny is defeatism, which breeds hopelessness, despair, abdication, and eventually suicide. If the machine ever conquers humanity and is regarded as a new Jehovah, it will not spare the human race, for it will be very nearly independent of us. The new Jehovah may spare a small chosen race of engineers and dictate a new Pentateuch to these engineers, but this will be cold comfort in a world in which very few have survived, and those only on sufferance.

My final quixotic suggestion is that, even as we now regard Nature, rightly or wrongly, as something to be overcome, so the machine may be beginning to regard *us* as something to be overcome and that it is in a very fair way already toward the achievement of

this end. Fortunately it is still a young organism with excessively abundant proliferations which we must prune as we now prune the proliferations of nature in our fields and gardens. If we do not set to work at this task immediately, we are in grave danger of being reduced to mold in the machine jungle. If we prune the machine sufficiently and gain self-control at the same time, it ought to prove a valuable servant.

The task before us is one which calls for every possible exertion of our mind and of our will. It is a religious task, and a religious task can only be performed properly by innocent people. Most of us are no longer innocent, but the education we ought to be giving to our children would preserve their innocence. Innocence is serene and may be trusted with all knowledge. I would withhold no knowledge from the young, but I would train the young to use their knowledge with quiet disinterestedness.

In youth, the American eye is more innocent than any other eye in the world. A former British Prime Minister once told me that he had never seen such generous innocence as he saw in the eyes of the young American soldiers who came to England during the first months after America entered into the war. Before fear is reflected in the eye of American youth, it can innocently stare down anything. By the time

that the young American soldiers were ready to come home in 1919, they had lost their innocence.

Our first task is therefore to save the innocence of the young, and to encourage them whenever they show a creative inclination. They will then be prepared when they reach manhood and womanhood to stare down machinery with innocent and heroic secret laughter, for they will know who they are and what is in their power.

APPENDIX

J. RIDDELL MEMORIAL AWARD

SHORT BEST STORIES

*A Parody Collection of the Best Short Stories of the Year,
and Other Literary Comments.*

By JOHN RIDDELL.¹

INTRODUCTION

By Edward J. O'Henry.

Encouraged by the success of all the other anthologies of short stories published annually in America, *Vanity Fair* has decided this year to found the J. Riddell Memorial Award; and for the initial volume they have done me the honour of asking me to write the same Introduction which I have been writing every year for my own collections of short stories, known as the *Best Short Stories of 1915*, the *Best Short Stories of 1916*, the *Best Short Stories of 1917*, the *Best Short Stories on Land and Sea*, the *Best Short Stories in an Airplane*, and the *Best Short Stories at Yale*.

In presenting, therefore, the first, if not last, volume of Prize Stories, I should like to take the opportunity to explain briefly the operation of the J. Riddell Memorial Award. This Award, as its name implies, was founded by

¹ Copyright, 1929, by The Condé Nast Publications, Inc. Copyright, 1929, by John Riddell.

Vanity Fair in honour of J. Riddell, the late short story writer (his short stories were anywhere from one to five years late). Every year a selected Committee will choose the Best Stories of the Year, which will be published in an annual volume entitled *The J. Riddell Memorial Award Prize Short Best Stories of 1929*; and the proceeds of this volume will be presented to J. Riddell, in the form of an Award. In addition there will be three prizes of \$500, \$200, and \$100 or its equivalent in merchandise, for anyone offering the best solution to the question of why these particular stories were chosen. The authors, on the other hand, get a dinner.

Perhaps the most unique feature of the *J. Riddell Memorial Award Prize Short Best Stories of 1929* is the fact that it is published *before any of the stories included in it are written*. This does not affect in any way the quality of the stories, and it also allows the *J. Riddell Memorial Award Prize Short Best Stories of 1929* (hereafter known as *Harry*) to score a distinct scoop on all the other anthologies, which will be publishing these self-same stories several months from now.

It is difficult for the average reader to imagine the gigantic task which confronts the editor of an anthology of short stories, before he may select those which conform most accurately to his standards of art, construction and reader-appeal. Since there are over sixty magazines from which these stories are selected, and since these magazines average annually anywhere from two to five hundred stories, this means that he must read something like five thousand stories a year in America, to say nothing of a similar number in England for his *Anthology of British Best Stories*. And reading ten thousand stories a year, counting time off for meals and every other Thursday, represents an average working-day of about thirty-seven hours, leaving him just seven minutes a year to award

his prizes, light a cigarette, and clear his desk for next year's batch. His task of finding a day with thirty-seven hours in it is alone colossal.

The method of selection may also be of interest to the average reader. In the first place, all short stories with a happy, or even a bearable, ending are automatically rejected. This leaves about ninety per cent of the short stories published in America. These remaining stories are then sorted carefully into separate piles, according to the colors of the covers on the magazines in which they appear; and the editor blindfolds himself, turns around three times, and then proceeds forward in a straight line across the room, out the front door, down the steps, and across the street to Tony's. By the time he returns all the magazines have been given away to the Salvation Army, and he is forced to write the Best Stories himself, under assumed names.

In order to assist the editor in his monumental task, the stories in this present volume have been grouped under the following heads: (1), The Gloomy Mid-West Story; (2), The Flying Story; (3), The Cowboy Story; (4), The Clinical Sophistication Story; (5), The Twist. There has been a distinct reaction this year against Suburban, Cape Cod and Russian Stories, and the percentage of heroic collies, stories of the younger generation, sea stories, and stories of degenerate artists in Parisian cafés has also materially been reduced. Fathers and sons, on the other hand, are coming back into vogue, and an increase in adolescent love has also been noted among the women's magazines. In other words, the American Short Story has made tremendous strides during the past year,—so tremendous in fact, that it is now almost back where it was in 1915, when I first started collecting.

In concluding the Introduction to *The First J. Riddell Memorial Award*, I should like to take this opportunity to

congratulate *Vanity Fair*, Mr. J. Riddell, and the editors who have laboured so hard to make this volume a success. Where would the American Short Story be today without these current anthologies? Where, for that matter, would be the editors?

Edward J. O'Henry.

"Among My Books,"
New York.

THE BEST SHORT STORIES OF 1929

(The Gloomy Mid-West Story) ¹

By MORTIMER L. F. SUET.

Minnie Timkins stared out the window across the desolate prairie, drab and flat and hopeless. A wet rain dripped from the eaves, like the cold water tap in the kitchen sink. She thought of the kitchen sink, piled high with last week's breakfast dishes, on which the grease had hardened in grey lumps. They had not eaten since last Thursday.

The door slammed. Eben shuffled to the coat-closet to hang up his coat. She did not raise her eyes: "The baby died today, Eben."

He did not reply. He had hung himself in the coat-closet, inside his coat.

There was a revolver in the top bureau drawer, but she was too weary to cross the room to get it. Outside the window the rain dripped steadily over the dull, empty futile prairie. Drip. Drip.

She broke her arm at the elbow, just to hear it snap.

¹ Copyright, 1928. *The American Mercury*.

UPSIDE LOOKING DOWN

(The Flying Story)

By ELLIOTT MONK BELLAH

B Flight blipped their motors and zoomed. Requ had taken the roof at eighteen thousand, and was skirting the wisps. Suddenly below him Brett saw a Hun two-seater. The old stunt. Perritt pulled up on his nose to climb above. Then L-Z threw himself up and over into an Immelman, and he came up under the tail, just as one of the Camels hurtled into a nose-dive. Too late. His Lewis had jammed. He yanked madly at the cocking lug, but the random was pip. Requ fuseled again. In vain Laurie caught at his thrashing joy-stick, but the jigger was averted, and the whole tribune splintered like fudge under his hand, as the left wing castored into up, then slowly taxied around, reversed, elbowed helplessly out of a nose, into an ear, out the other, following the wake of Perritt . . . down . . . down . . . down . . .

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THE LONE RIDER OF TARNATION GULCH

(The Cowboy Story)

By ZANE MIX

"Put 'em up, thar!"

The crisp command rang out above the tinny rattle of the cheap piano in "Ye Olde Lavender Kettle" Saloon, and

forty pairs of hands shot into the air with a deafening report. Forty pairs of eyes watched the masked stranger in the doorway.

"Drap them thar shootin' irons," continued the even voice, sighting down the cold muzzle of his gun, "or I'll empty the contents of this magazine (*adv.*)" And by his tone the dissolute crowd of cattle-rustlers knew that he meant what he said.

"What you want of us-all, pardner?" whined Saunders.

"I come fer Prairie Rose," the stranger replied, "her with a voice like a nightingale, whut come out o' nowhere to warm our hearts with song—Gawd bless 'er."

The beaded curtains parted, and the beautiful dancer stared at the bearded stranger in wide-eyed surprise. Gently he reached down inside his dust-stained shirt and drew forth a tiny locket on a gold chain.

"Mother," said the stranger simply.

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HE WOULD IF HE COULD; OR, THE TATTOOED BEAVER

(The Clinical Sophistication Story)

By PARODY KEENE

She sat in the bath and opened her mail slowly. Poor André. Gently she slit the envelope open and pressed his burning letter to her wet lips.

". . . my beloved," she read, "my own, my sweet, my pet, my life. Your André."

She tore his impassioned note into shreds, and watched them drift down the tub toward her rouged knees, that rose like tropical islands above the surface of the scented

water. *C'est ça*. It was thus she tore her heart into shreds, and let them float down the bathtub of life, out of her memory forever. She must forget André. Raoul must never know.

There was a draft blowing upon her back. Raoul! She rose and faced him with arms outstretched, as he climbed through the bathroom window, his eyes ablaze with love for her. Dear Raoul. Sweet Raoul. "Dear Raoul," she said. "Sweet Raoul."

"My beloved, my own, my sweet, my pet, my life. . . ."

What did life matter without Raoul? He was pressing kisses to her forehead, her eyes, her nose, her lips. . . . What was sin, so long as he trusted her? . . . He was kissing her chin, her throat. . . . No, she would put André from her life forever. . . . He had dropped to his knees before her. . . . Yes, she was Raoul's woman from now on—Raoul's woman in the primitive sense. . . . What was this? He had paused in the act of kissing her. He was staring fascinated at her knee.

With a cold horror she gazed downward. Pressed to her knee-cap, clinging to the damp flesh with a fatal persistence, was a tell-tale triangle of wet paper: ". . . sweet, my pet, my life. Your André."

For a moment she stood tense, fists clenched, as the door of the bathroom slammed behind Raoul. Gone. Gone from her life forever. Slowly, like a wilting flower, she bent low.

"You may come out from under the tub now, Claude," she whispered softly.

THE FACE IN THE REVOLVING DOOR

(The Twist)

By JOHN RIDDELL

"Who are you?" he cried fearfully.

The bland Oriental drew off his wig and smiled. Inspector Donnelly stared in surprise at the erstwhile Ling Wu, now revealed before him as none other than Mabelle Le Claire.

"My darling . . . my wife . . ." he gasped. "This has all been a plot to test your affection for me. I wanted to arouse your jealousy so that you would forget Claude Harrington."

With a slight sneer Mabelle Le Claire whipped out a revolver and shot him in the stomach. Swiftly she fastened a black moustache to her upper lip and bent over the dying man with a leer.

"I am Claude Harrington," she hissed in triumph. "Who are you?"

With a feeble gesture Inspector Donnelly plucked the white beard from his chin.

"I am Mabelle Le Claire," replied the late William L. Van Aimée, Jr.

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THE YEARBOOK OF THE AMERICAN SHORT STORY

APRIL, 1929, TO APRIL, 1929.

THE JUDGES:

Mrs. W. Q. McPlash, A.M., P.M., Instructor in English at State Normal School for Feeble-Minded, Wilgus, Wisconsin. Story writer.

Loretta Diana Deeples Goush, winner of Silver Badge, St. Nicholas League (1881); attended High School in Duluth. Story writer.

Mrs. Messersmith, contralto; chairman of the Literary Section of the Montclair (N. J.) Tuesday Ladies' Bicycle and Whist Club. Story writer. Also had one accepted.

Subst.: Osterholz for Messersmith (2); Osterholz for McPlash (3); Osterholz for Blee (4); Osterholz for himself, from now on, and to hell with everybody.

ROLL OF HONOR AMONG MAGAZINES:

<i>Abbreviations:</i>	<i>Averages:</i>	<i>Fin.:</i>
Awf. Glug.	96	1 ²
Brx.	1	2 ¹¹ / ₂
Zblu. Mli.	131 ³ / ₄	3h
Oo.	17	4
Growgle J.	No Sale	5

Three furlongs, Post, 2:04; off. 2:07. Winner ch. g., 3, by Beet—Squidgums. Time 0:35¹/₄.

Scratched: Spanish Onion; Wee Wee.

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** I Dreamt I was a Lily of the Valley, FV, X Apr., '29 (17)

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* Does not run week-days or Sundays. ** These dishes are ready. *** Wall Street Final. **** Stops on signal at Boggy Meadows. ***** Girl friend of the editor.

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